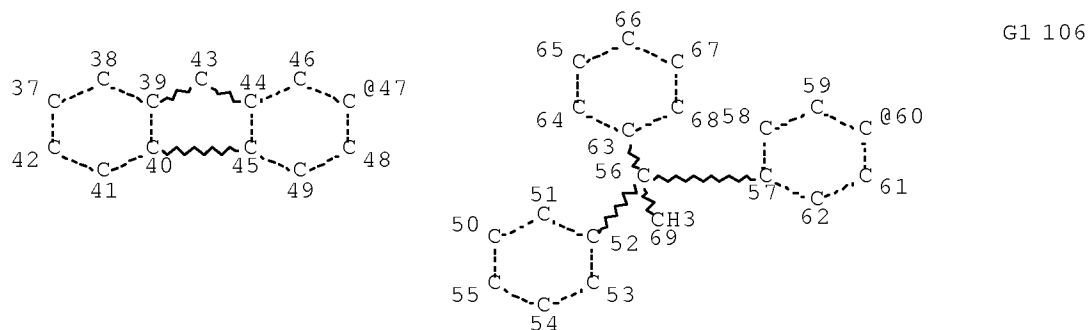
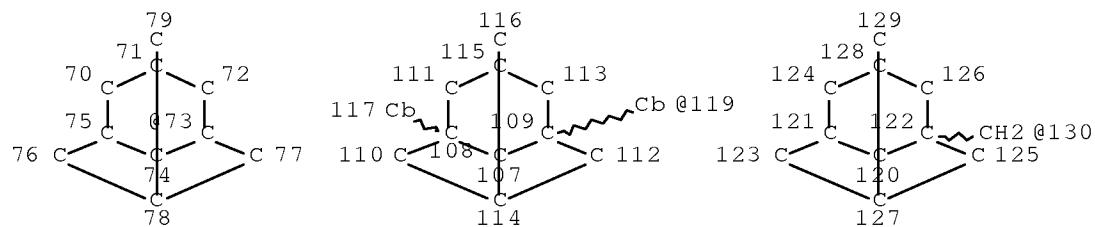


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 BI OR 125748-07-4/BI OR 156281-11-7/BI OR 1927-95-3/BI OR
 211427-64-4/BI OR 24424-99-5/BI OR 27955-94-8/BI OR
 29654-55-5/BI OR 5001-18-3/BI OR 5292-43-3/BI OR 623-05-2/B
 I OR 65338-98-9/BI OR 683227-72-7/BI OR 683227-73-8/BI OR
 683227-74-9/BI OR 683227-75-0/BI OR 683227-76-1/BI OR
 75-07-0/BI OR 99181-50-7/BI)
 L9 STR



Page 1-A



Page 2-A

VAR G1=47/60/73/119/130

NODE ATTRIBUTES:

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DEFAULT ECLEVEL IS LIMITED

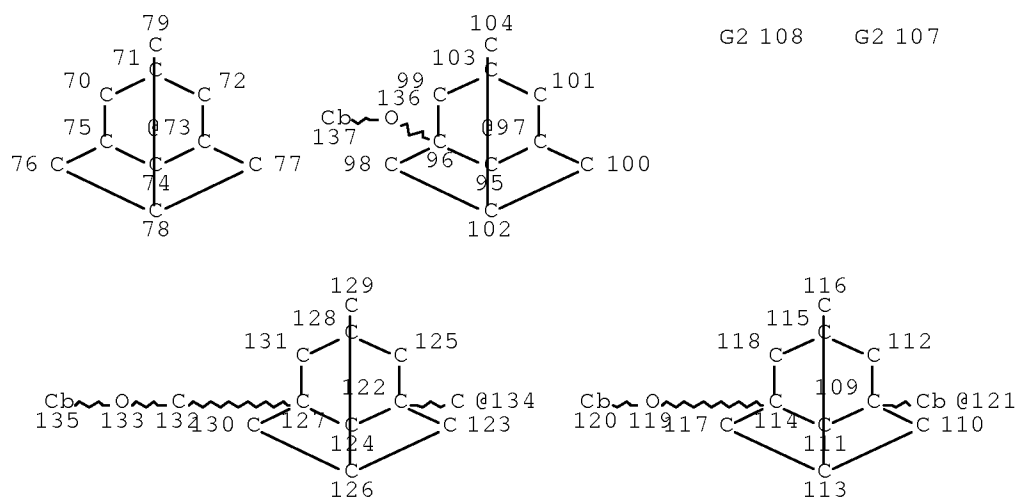
GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 67

STEREO ATTRIBUTES: NONE

L11 STR

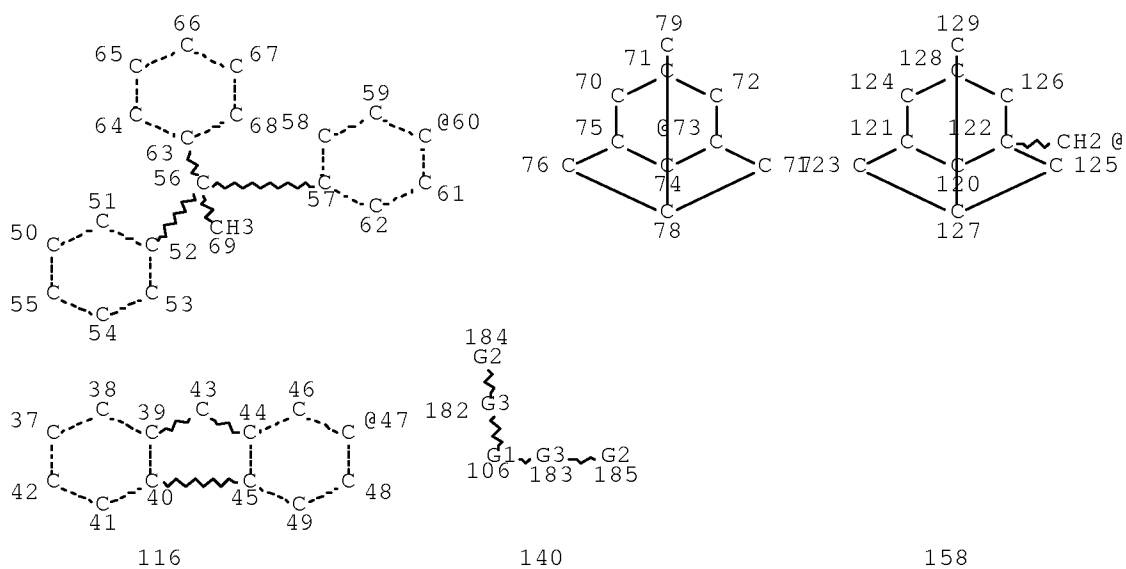


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 DEFAULT ECLEVEL IS LIMITED

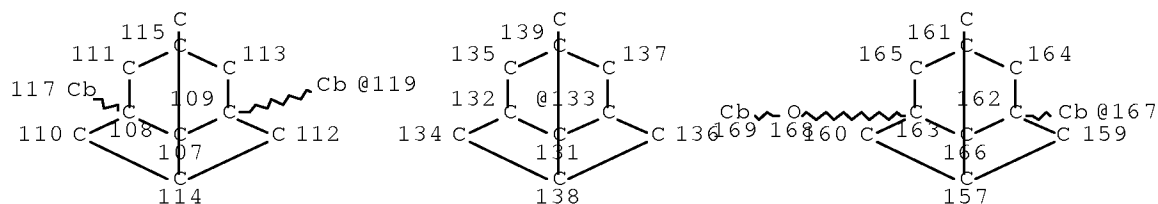
GRAPH ATTRIBUTES:
 RSPEC I
 NUMBER OF NODES IS 51

STEREO ATTRIBUTES: NONE

L16 6945 SEA FILE=REGISTRY SSS FUL L9 AND L11
 L18 1 SEA FILE=REGISTRY ABB=ON PLU=ON L16 AND L2
 L21 STR



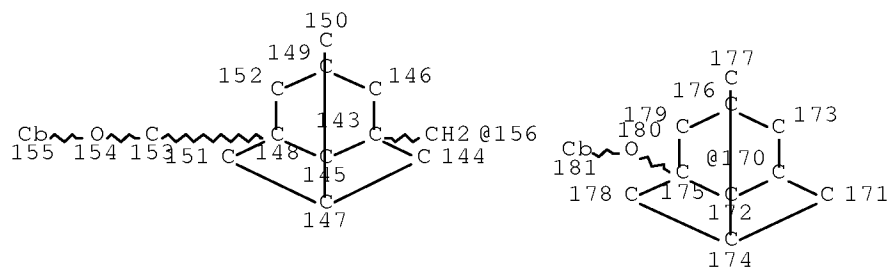
Page 1-B



Page 2-A

7

Page 2-B



Page 3-A

VAR G1=47/60/73/119/130

VAR G2=CB/133/167/156/170

REP G3=(0-1) O

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 120

STEREO ATTRIBUTES: NONE

L23 87 SEA FILE=REGISTRY SUB=L16 SSS FUL L21

L24 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L18

L28 17316 SEA FILE=REGISTRY ABB=ON PLU=ON 11417.1/RID

L29 56 SEA FILE=REGISTRY ABB=ON PLU=ON L23 NOT L28

L30 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L29

L31 17 SEA FILE=HCAPLUS ABB=ON PLU=ON L30 OR L24

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 11:49:52 ON 19 NOV 2008

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FILE COVERS 1907 - 19 Nov 2008 VOL 149 ISS 21
 FILE LAST UPDATED: 18 Nov 2008 (20081118/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l31 1-17 ibib ed abs hitstr hitind

L31 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2008:1068852 HCAPLUS Full-text
 DOCUMENT NUMBER: 149:333530
 TITLE: Organic insulating materials with low dielectric constant and high mechanical strength and heat resistance, varnish for organic insulating films and semiconductor device using them
 INVENTOR(S): Matsutani, Mihoko; Izumi, Atsushi; Sano, Yohko; Fujita, Kazuyoshi
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 103pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2008105551	A1	20080904	WO 2008-JP53722	20080226
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

10/531,208

PRIORITY APPLN. INFO.:

JP 2007-48890

A 20070228

JP 2007-309715

A 20071130

ED Entered STN: 05 Sep 2008

AB The materials contain a compound represented by X-V-(W)n-Y (X,Y = groups polymerizable groups; V,W = group having an adamantane or polyadamantane structure; n = 0 or an integer not less than 1), its polymer or its mixture with the polymer.

IT 1052275-39-4P

(manufacture of adamantyl structure-containing compds. for use in elec. insulating films or semiconductor devices with low dielec. constant and high mech. strength and heat resistance)

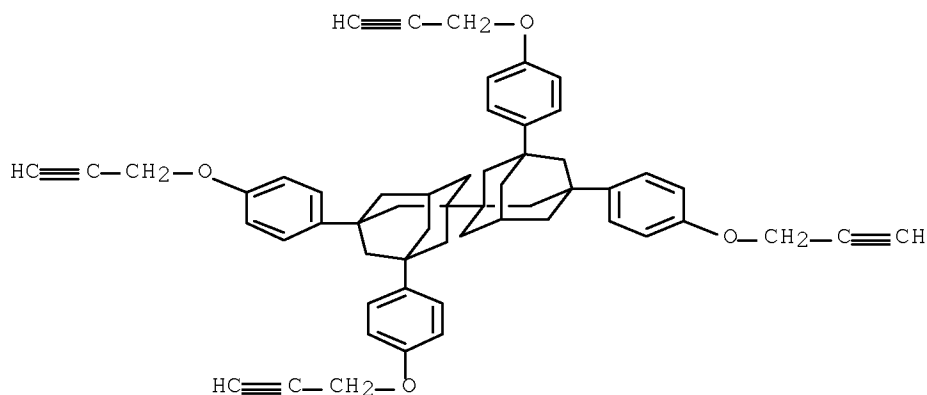
RN 1052275-39-4 HCAPLUS

CN 1,1'-Bitricyclo[3.3.1.1³,7]decane,
3,3',5,5'-tetrakis[4-(2-propyn-1-yloxy)phenyl]-, homopolymer (CA INDEX NAME)

CM 1

CRN 952428-06-7

CMF C56 H54 O4

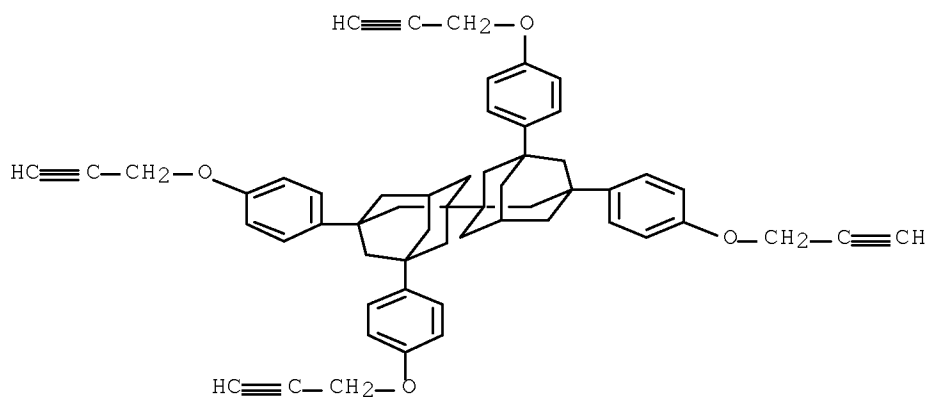


IT 952428-06-7P

(manufacture of adamantyl structure-containing compds. for use in elec. insulating films or semiconductor devices with low dielec. constant and high mech. strength and heat resistance)

RN 952428-06-7 HCAPLUS

CN 1,1'-Bitricyclo[3.3.1.1³,7]decane,
3,3',5,5'-tetrakis[4-(2-propyn-1-yloxy)phenyl]- (CA INDEX NAME)

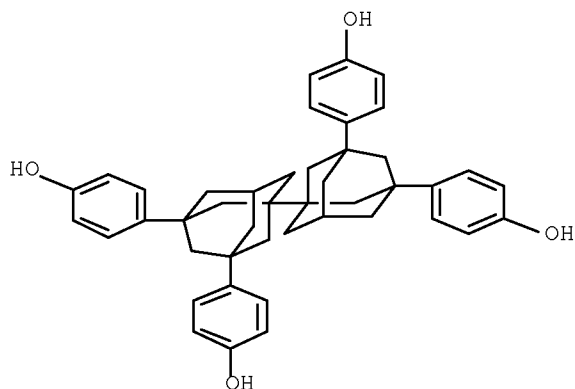


IT 916645-89-1

(manufacture of adamantyl structure-containing compds. for use in elec. insulating films or semiconductor devices with low dielec. constant and high mech. strength and heat resistance)

RN 916645-89-1 HCAPLUS

CN Phenol, 4,4',4'',4'''-[1,1'-bitricyclo[3.3.1.1.3,7]decane]-3,3',5,5'-tetrayltetrakis- (CA INDEX NAME)



CC 38-3 (Plastics Fabrication and Uses)

IT 134334-31-9P 923295-04-9P 930306-46-0P 954144-92-4P
 1052275-27-0P 1052275-31-6P 1052275-34-9P 1052275-39-4P
 1052275-43-0P 1052275-56-5P 1052275-65-6P 1052275-73-6P
 1052275-79-2P 1052275-83-8P 1052275-87-2P 1052275-91-8P
 1052275-91-8P 1052275-97-4P

(manufacture of adamantyl structure-containing compds. for use in elec. insulating films or semiconductor devices with low dielec. constant and high mech. strength and heat resistance)

IT 941-37-7P, 1-Bromo-3,5-dimethyladamantane 3732-31-8P,
 1,1'-Biadamantane 63263-14-9P 134334-26-2P,
 4,9-Diethynyldiamantane 150785-12-9P 923295-03-8P 930306-44-8P
 942936-15-4P 951694-69-2P 951694-70-5P 951694-72-7P
 952428-02-3P 952428-04-5P 952428-05-6P 952428-06-7P
 952428-07-8P 954144-91-3P 1052275-47-4P 1052275-54-3P

1052275-58-7P 1052275-71-4P 1052275-75-8P 1052275-77-0P
 1052275-85-0P 1052275-89-4P 1052275-89-4P 1052275-95-2P

(manufacture of adamantyl structure-containing compds. for use in elec.
 insulating films or semiconductor devices with low dielec. constant
 and high mech. strength and heat resistance)

IT 74-88-4, Methyl iodide, reactions 106-96-7, 3-Bromo-1-propyne
 108-36-1, 1,3-Dibromobenzene 108-86-1, Bromobenzene, reactions
 536-74-3, Ethynylbenzene 593-60-2, Bromoethene 768-90-1,
 1-Bromoadamantane 1066-54-2, Trimethylsilylacetylene 30545-30-3,
 4-Bromodiamantane 30651-02-6, 4,9-Dibromodiamantane 63263-17-2
 894105-73-8 897442-61-4 ~~916645-89-1~~ 952428-03-4
 1052275-61-2 1052275-63-4

(manufacture of adamantyl structure-containing compds. for use in elec.
 insulating films or semiconductor devices with low dielec. constant
 and high mech. strength and heat resistance)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L31 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:156259 HCAPLUS Full-text

DOCUMENT NUMBER: 148:216921

TITLE: Benzoxazole precursors, resin compositions and
 coating varnishes using them, resin films
 therefrom, and semiconductor devices having the
 films

INVENTOR(S): Yamanoi, Yumiko; Izumi, Atsushi

PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 24pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2008024900	A	20080207	JP 2006-202347	20060725
PRIORITY APPLN. INFO.:			JP 2006-202347	20060725

ED Entered STN: 07 Feb 2008

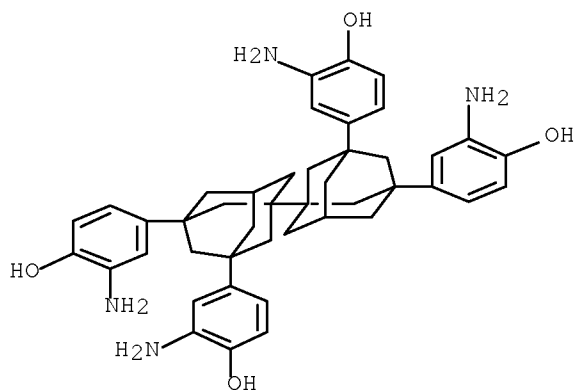
AB Title precursors consist of aromatic compds. having aminohydroxyphenyl groups,
 CO₂H, and diamondoid structures. Title varnishes show good storage stability
 and form films with low dielec. constant Thus, 3-(3-amino-4-hydroxyphenyl)-
 3'-carboxy(5,5',7,7'-tetramethyl-1,1'-biadamantane) (prepared from 1-bromo-
 3,5-dimethyladamantane in several steps) was dissolved in N-methyl-2-
 pyrrolidone, mixed with pyridine and tri-Ph phosphite, and stirred at -15° to
 a room temperature for 3 h to give a polybenzoxazole precursor, which was
 dissolved in N-methyl-2-pyrrolidone, filtered, applied on a Si wafer, and
 heated stepwise to give a film showing Tg 380°, 5% weight-loss temperature
 523°, and sp. inductive capacity 2.3.

IT 920511-53-1P, 3,3',5,5'-Tetrakis(3-amino-4-hydroxyphenyl)-1,1'-
 biadamantane

(benzoxazole precursors for coating varnishes for semiconductor
 devices)

RN 920511-53-1 HCAPLUS

CN Phenol, 4,4',4'',4'''-[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3',5,5'-
 tetrayl]tetrakis[3-amino- (CA INDEX NAME)



CC 42-10 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 76
 IT 41826-66-8P, 1,1'-Biadamantyl-3,3',5,5'-tetracarboxylic acid
 150785-12-9P, 3,3',5,5'-Tetrabromo-1,1'-biadamantane 866755-59-1P,
 1-Trifluoromethanesulfonyloxy-4-(3,5-dimethyl-1-adamantyl)benzene
 866755-61-5P, 1-Ethynyl-4-(3,5-dimethyl-1-adamantyl)benzene
 890404-31-6P, 1,3-Bis[4-(3-hydroxy-4-aminophenoxy)]-4,6-bis(3,5-
 dimethyl-1-adamantyl)benzene 894105-70-5P 903892-76-2P,
 5,5',7,7'-Tetramethyl-1,1'-biadamantyl-3-carboxylic acid
 920511-53-1P, 3,3',5,5'-Tetrakis(3-amino-4-hydroxyphenyl)-1,1'-
 biadamantane 920511-55-3P, 4,6-Bis(3,5-dimethyladamantyl)resorcinol
 920742-31-0DP, 2-Amino-4-(3,5-dimethyl-1-adamantyl)phenol, reaction
 products with (aminohydroxyphenyl)carboxy(tetramethylbiadamantane)
 homopolymer 920742-31-0P, 2-Amino-4-(3,5-dimethyl-1-adamantyl)phenol
 1004764-98-0P, Methyl 3-bromo-5,5',7,7'-tetramethyl-1,1'-biadamantyl-
 3'-carboxylate 1004764-99-1P,
 3-(3-Amino-4-hydroxy)phenyl-3'-carboxy-5,5',7,7'-tetramethyl-1,1'-
 biadamantane 1004765-03-0DP,
 4-[[4-(3,5-Dimethyl-1-adamantyl)phenyl]ethynyl]benzoic acid, reaction
 products with (aminohydroxyphenyl)carboxy(tetramethylbiadamantane)
 homopolymer 1004765-03-0P, 4-[[4-(3,5-Dimethyl-1-
 adamantyl)phenyl]ethynyl]benzoic acid 1004765-04-1P,
 2,4-Bis(3,5-dimethyl-1-adamantyl)-1-hydroxy-5-methoxybenzene
 1004765-05-2P, 1-Hydroxy-3-(4-carboxyphenoxy)-4,6-bis(3,5-dimethyl-1-
 adamantyl)benzene 1004765-06-3P,
 1,3-Bis(3,5-dimethyl-1-adamantyl)-4-(4-amino-3-hydroxyphenoxy)-6-(4-
 carboxyphenoxy)benzene
 (benzoxazole precursors for coating varnishes for semiconductor
 devices)

L31 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:1174641 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 147:448465
 TITLE: Preparation of biadamantanes bearing acetylene
 bonds
 INVENTOR(S): Fujita, Kazuyoshi; Izumi, Atsushi; Harada,
 Takahiro
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

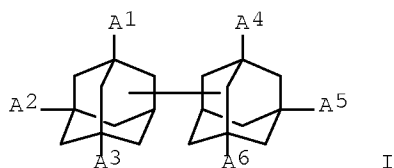
PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE -----
JP 2007269727	A	20071018	JP 2006-99427	20060331
PRIORITY APPLN. INFO.:			JP 2006-99427	20060331

OTHER SOURCE(S): CASREACT 147:448465; MARPAT 147:448465

ED Entered STN: 18 Oct 2007

GI



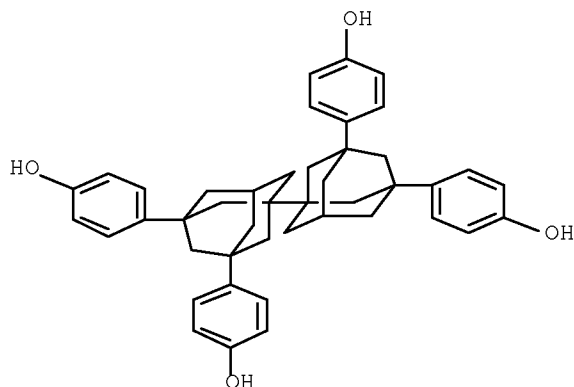
AB The biadamantanes I (A1-A6 = organic group, acetylene bond-containing group; ≥ 2 of A1-A6 = acetylene bond-containing group), useful for heat-resistant elec. insulating films with low dielec. constant for semiconductor devices (no data), are prepared. Thus, 3,3'-dihydroxy-5,5',7,7'-tetramethyl-1,1'-biadamantane was treated with 3-bromo-1-propyne to give 3,3',5,5'-tetramethyl-7,7'-bis(2-propynyloxy)-1,1'-biadamantane.

IT 916645-89-1

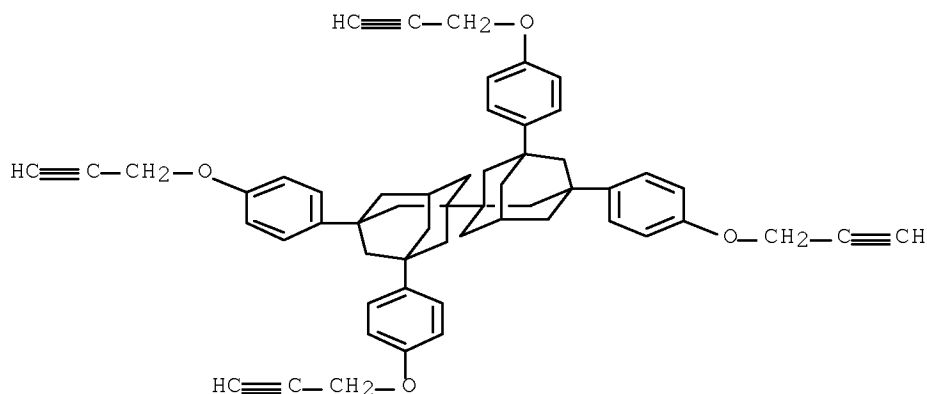
(preparation of biadamantanes bearing acetylene bonds for heat-resistant elec. insulating films with low dielec. constant for semiconductor devices)

RN 916645-89-1 HCAPLUS

CN Phenol, 4,4',4'',4'''-[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3',5,5'-tetrayltetrakis- (CA INDEX NAME)



IT 952428-06-7P
 (preparation of biadamantanes bearing acetylene bonds for heat-resistant elec. insulating films with low dielec. constant for semiconductor devices)
 RN 952428-06-7 HCAPLUS
 CN 1,1'-Bitricyclo[3.3.1.1³,7]decane,
 3,3',5,5'-tetrakis[4-(2-propyn-1-yloxy)phenyl]- (CA INDEX NAME)



CC 24-8 (Alicyclic Compounds)
 Section cross-reference(s): 35, 76
 IT 106-96-7, 3-Bromo-1-propyne 63263-17-2 897442-61-4
 916645-89-1 942936-15-4 952428-03-4
 (preparation of biadamantanes bearing acetylene bonds for heat-resistant elec. insulating films with low dielec. constant for semiconductor devices)
 IT 952428-02-3P 952428-04-5P 952428-05-6P 952428-06-7P
 952428-07-8P
 (preparation of biadamantanes bearing acetylene bonds for heat-resistant elec. insulating films with low dielec. constant for semiconductor devices)

L31 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:1116320 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 147:428949
 TITLE: Resin compositions with good heat resistance and low dielectric constant for varnish and semiconductor devices
 INVENTOR(S): Fujita, Kazuyoshi; Izumi, Atsushi; Yamanoi, Yumiko; Harada, Takahiro; Oki, Hiromi; Ono, Yukiharu
 PATENT ASSIGNEE(S): Sumitomo Bakelite Company, Ltd., Japan
 SOURCE: PCT Int. Appl., 115pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007111168	A1	20071004	WO 2007-JP55431	20070316

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

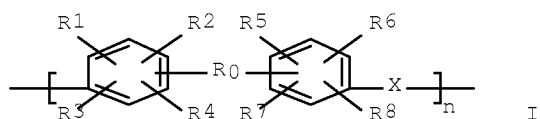
PRIORITY APPLN. INFO.:

JP 2006-91336

A 20060329

ED Entered STN: 04 Oct 2007

GI



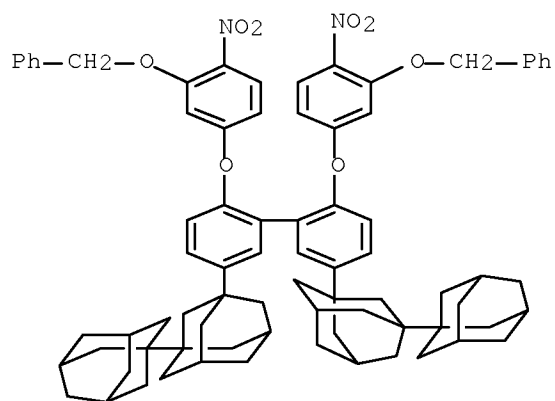
AB The title resin compns. comprise a compound having a structure I and a crosslinking agent, wherein R0 = single bond or YAr(R0)qY; R1-8 = independently H, alicyclic group, C1-10 organic group excluding alicyclic group, OH, or carboxyl group; X = O, NHCO, CONH, COO, or COC; Y = single bond, O, S, OCO, or COO; q = ≥ 1 integer; and R9 = H or C ≥ 1 organic group (at least one of one of R1 to R8 = alicyclic group when R0 = single bond, and at least one of R1 to R9 = alicyclic group when R0 = YAr(R0)qY). Thus, 84.8 g 1-bromo-3,5-dimethyladamantane and 9.58 g 1,3-dihydroxybenzene were reacted at 130° for 24 h, further reacted with 2-benzyloxy-4-fluoronitrobenzene at 135° for 12 h, and debenzylated to give 4,6-di(3,5-dimethyl-1-adamantyl)-1,3-bis(4-amino-3-hydroxyphenoxy)benzene, 0.10 mol of which was copolymd. with 0.095 mol 5,5',7,7'-tetramethyl-1,1'-biadamantane-3,3'-dicarboxylic dianhydride to give a benzoxazole precursor with Mn 21,000, 0.9 g of which was mixed with 0.1 g 9,9-bis(3-(4-phenylethynylbenzamido)-4-hydroxyphenyl)-fluorene in NMP, applied on a silicon wafer, and dried at 90° for 1 min and 400° for 1 h to give a coating, showing glass transition temperature 401°, thermal decomposition temperature 482°, dielec. constant 2.5, and elastic modulus 7.1 GPa.

IT 951694-39-6P 951694-63-6P 951694-64-7P

(intermediate in monomer preparation; resin compns. containing adamantane structure-containing polybenzoxazoles or polyimides)

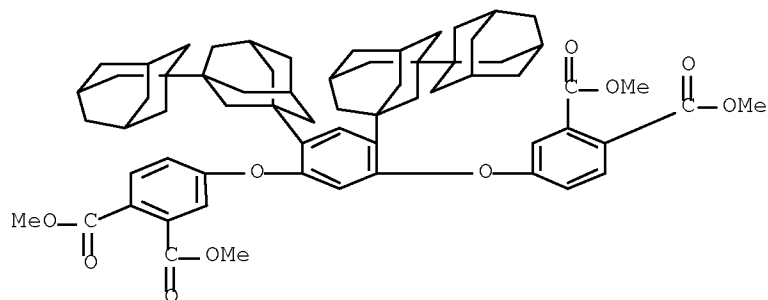
RN 951694-39-6 HCAPLUS

CN 1,1'-Bitricyclo[3.3.1.1^{3,7}]decane,
 3,3'-[6,6'-bis[4-nitro-3-(phenylmethoxy)phenoxy][1,1'-biphenyl]-3,3'-diyl]bis- (CA INDEX NAME)



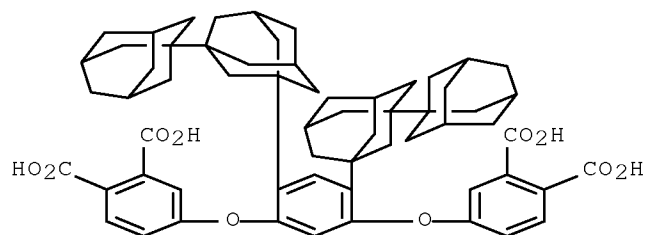
RN 951694-63-6 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, 4,4'-[[4,6-bis([1,1'-bitricyclo[3.3.1.13,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis-, 1,1',2,2'-tetramethyl ester (CA INDEX NAME)



RN 951694-64-7 HCAPLUS

CN 1,2-Benzenedicarboxylic acid, 4,4'-[[4,6-bis([1,1'-bitricyclo[3.3.1.13,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis- (CA INDEX NAME)

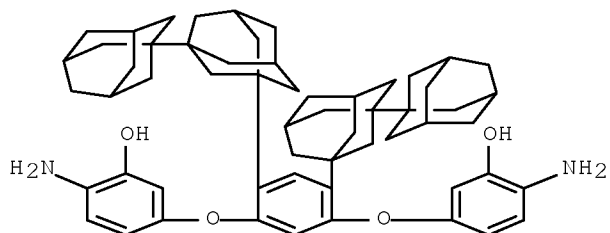


IT 890404-08-7P 942203-46-5P 951694-29-4P
951694-40-9P 951694-56-7P

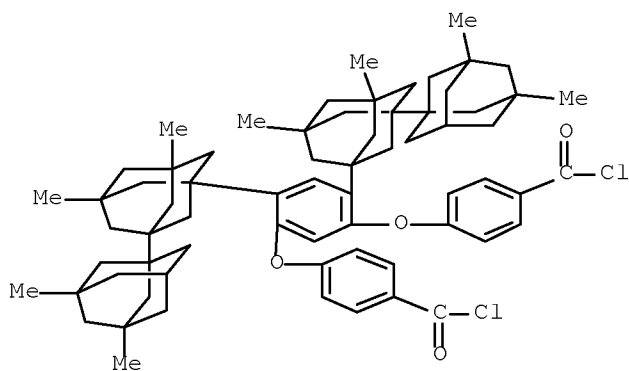
(monomer; resin compns. containing adamantane structure-containing

polybenzoxazoles or polyimides)

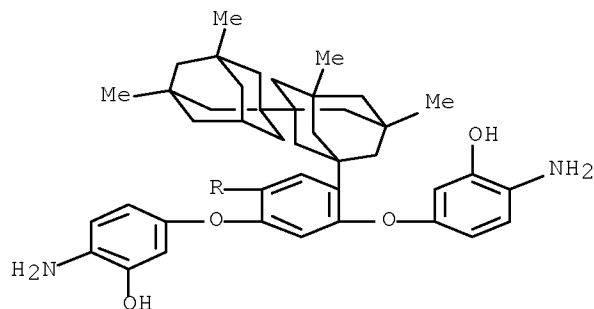
RN 890404-08-7 HCAPLUS

CN Phenol, 3,3'-[[4,6-bis([1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis[6-amino- (CA INDEX NAME)

RN 942203-46-5 HCAPLUS

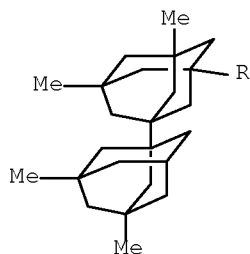
CN Benzoyl chloride, 4,4'-[[4,6-bis(3',5,5',7-tetramethyl[1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis- (CA INDEX NAME)

RN 951694-29-4 HCAPLUS

CN Phenol, 3,3'-[[4,6-bis(3',5,5',7-tetramethyl[1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis[6-amino- (CA INDEX NAME)

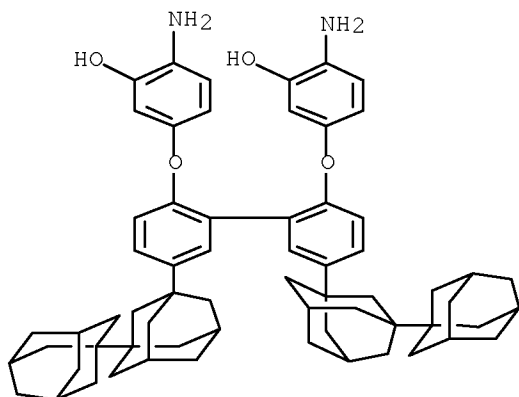
PAGE 1-A

PAGE 2-A



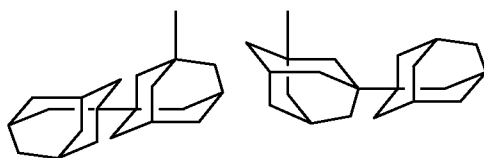
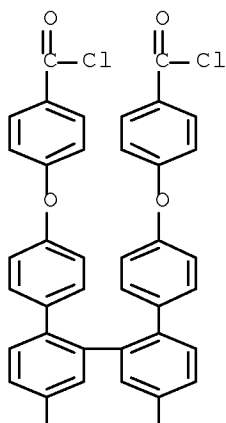
RN 951694-40-9 HCAPLUS

CN Phenol, 3,3'-[[5,5'-bis([1,1'-bitricyclo[3.3.1.13,7]decan]-3-yl)[1,1'-biphenyl]-2,2'-diyl]bis(oxy)]bis[6-amino- (CA INDEX NAME)

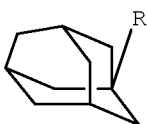
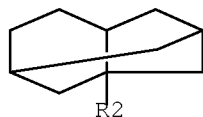


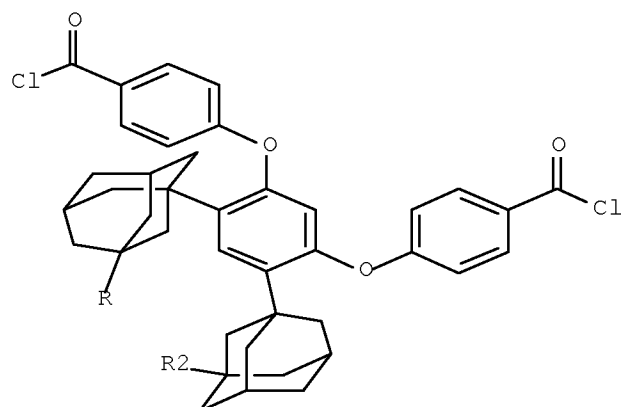
RN 951694-56-7 HCAPLUS

CN Benzoyl chloride, 4,4'-[[4',5''-bis([1,1'-bitricyclo[3.3.1.13,7]decan]-3-yl)[1,1':2',1'':2'',1'''-quaterphenyl]-4,4'''-diyl]bis(oxy)]bis- (CA INDEX NAME)



IT 951694-47-6
 (monomer; resin compns. containing adamantane structure-containing
 polybenzoxazoles or polyimides)
 RN 951694-47-6 HCAPLUS
 CN Benzoyl chloride, 4,4'-[[4,6-bis([1,1'-bitricyclo[3.3.1.3⁷,7]decan]-3-
 yl)-1,3-phenylene]bis(oxy)]bis- (CA INDEX NAME)





IT 951695-48-0P 951695-57-1P 951695-78-6P
 951695-79-7P
 (precursor; resin compns. containing adamantane structure-containing
 polybenzoxazoles or polyimides)

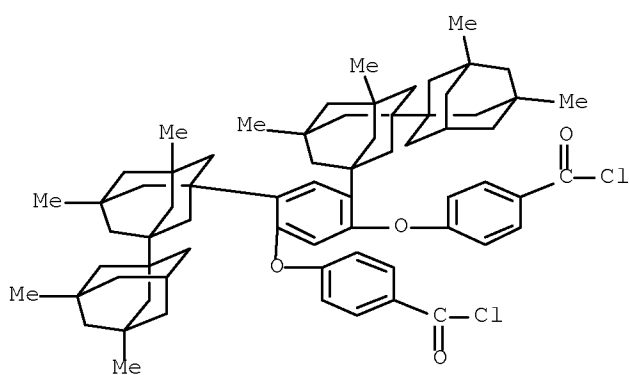
RN 951695-48-0 HCAPLUS

CN Benzoyl chloride, 4,4'-[[4,6-bis(5,5',7,7'-tetramethyl[1,1'-
 bitricyclo[3.3.1.1^{3,7}]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis-,
 polymer with 3,3'-[[4,6-bis(3,5-dimethyltricyclo[3.3.1.1^{3,7}]dec-1-yl)-
 1,3-phenylene]bis(oxy)]bis[6-aminophenol] (CA INDEX NAME)

CM 1

CRN 942203-46-5

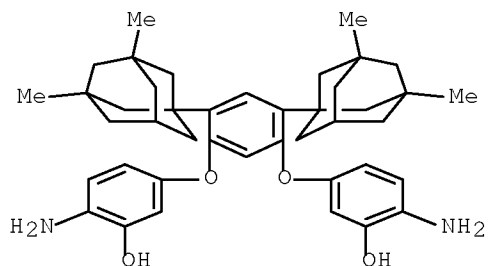
CMF C68 H84 Cl2 O4



CM 2

CRN 890404-31-6

CMF C42 H52 N2 O4



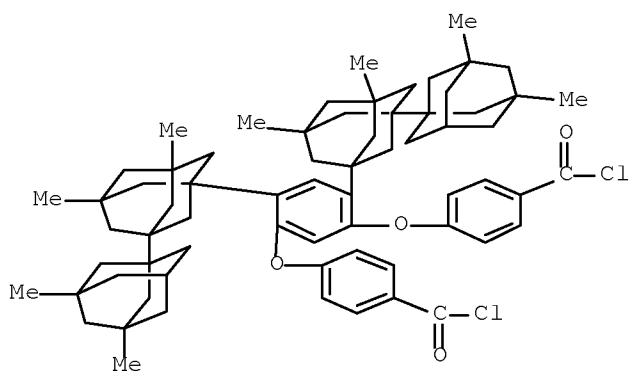
RN 951695-57-1 HCAPLUS

CN Benzoyl chloride, 4,4'-[[4,6-bis(5,5',7,7'-tetramethyl[1,1'-bicyclo[3.3.1.1.3,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis-, polymer with 4,4'-(9H-fluoren-9-ylidene)bis[2-aminophenol] (CA INDEX NAME)

CM 1

CRN 942203-46-5

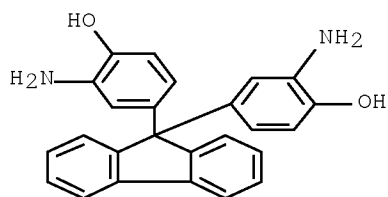
CMF C68 H84 C12 O4



CM 2

CRN 20638-07-7

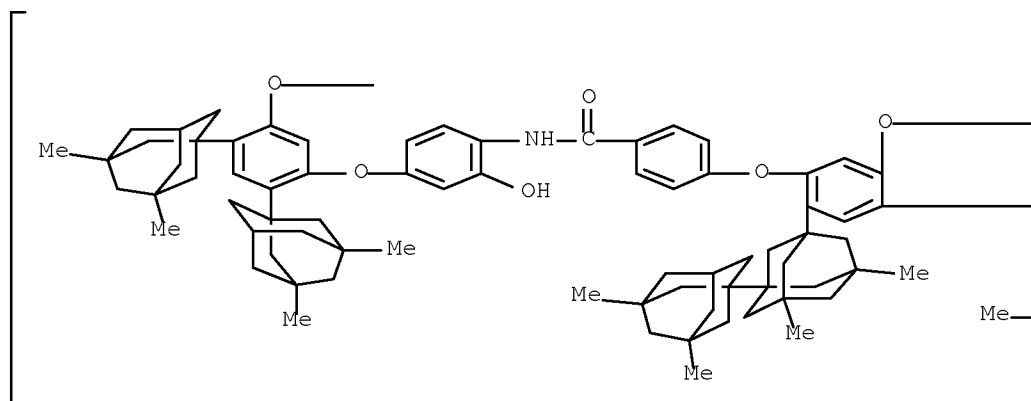
CMF C25 H20 N2 O2



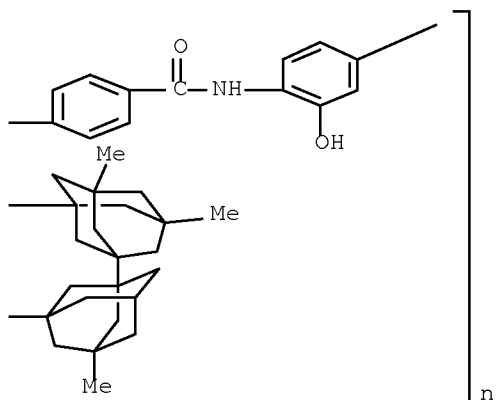
RN 951695-78-6 HCAPLUS

CN Poly[oxy[4,6-bis(3,5-dimethyltricyclo[3.3.1.1^{3,7}]dec-1-yl)-1,3-phenylene]oxy(3-hydroxy-1,4-phenylene)iminocarbonyl-1,4-phenyleneoxy[4,6-bis(3',5,5',7-tetramethyl[1,1'-bitricyclo[3.3.1.1^{3,7}]decan]-3-yl)-1,3-phenylene]oxy-1,4-phenylenecarbonylimino(2-hydroxy-1,4-phenylene)] (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



RN 951695-79-7 HCAPLUS

CN Poly[oxy[4,6-bis(3',5,5',7-tetramethyl[1,1'-bitricyclo[3.3.1.1^{3,7}]decan]-3-yl)-1,3-phenylene]oxy-1,4-phenylenecarbonylimino(6-hydroxy-1,3-phenylene)-9H-fluoren-9-ylidene(4-hydroxy-1,4-phenylene)iminocarbonyl-1,4-phenylene] (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

IT 951695-50-4P 951695-59-3P

(resin compns. containing adamantane structure-containing polybenzoxazoles or polyimides)

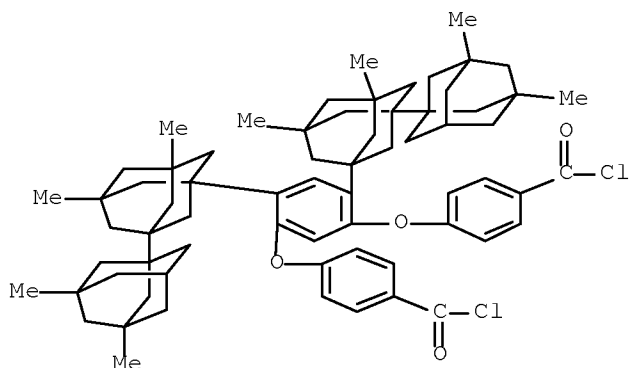
RN 951695-50-4 HCAPLUS

CN Benzoyl chloride, 4,4'-[[4,6-bis(3',5,5',7-tetramethyl[1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis-, polymer with 3,3'-bis(3,5-diethynylphenyl)-5,5',7,7'-tetramethyl-1,1'-bitricyclo[3.3.1.1³,7]decane and 3,3'-[[4,6-bis(3,5-dimethyltricyclo[3.3.1.1³,7]dec-1-yl)-1,3-phenylene]bis(oxy)]bis[6-aminophenol] (CA INDEX NAME)

CM 1

CRN 942203-46-5

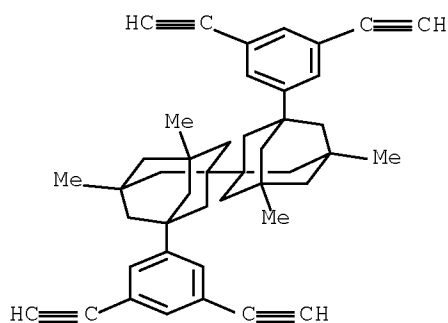
CMF C68 H84 Cl2 O4



CM 2

CRN 930306-44-8

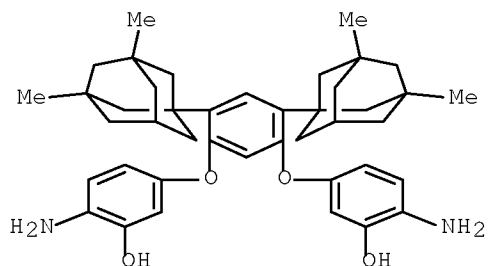
CMF C44 H46



CM 3

CRN 890404-31-6

CMF C42 H52 N2 O4



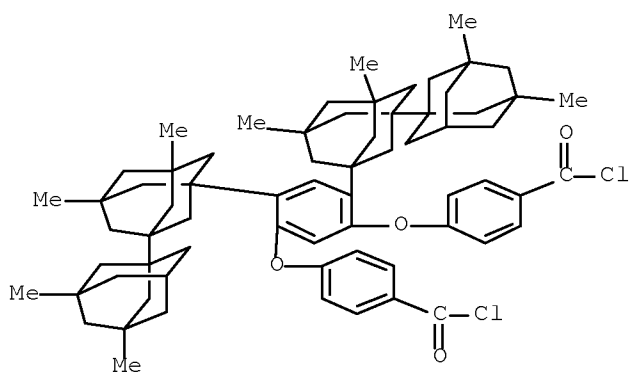
RN 951695-59-3 HCAPLUS

CN Benzoyl chloride, 4,4'-[[4,6-bis(5,5',7,7'-tetramethyl[1,1'-bitricyclo[3.3.1.1.3,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis-, polymer with 3,3'-bis(3,5-diethynylphenyl)-5,5',7,7'-tetramethyl-1,1'-bitricyclo[3.3.1.1.3,7]decane and 4,4'-(9H-fluoren-9-ylidene)bis[2-aminophenol] (CA INDEX NAME)

CM 1

CRN 942203-46-5

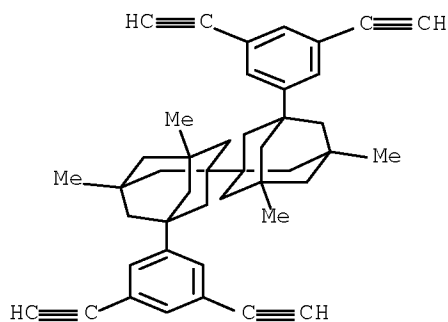
CMF C68 H84 Cl2 O4



CM 2

CRN 930306-44-8

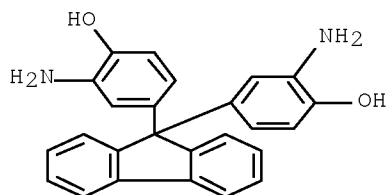
CMF C44 H46



CM 3

CRN 20638-07-7

CMF C25 H20 N2 O2



CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35, 76

IT 367279-75-2P 406680-57-7P 722454-63-9P 846543-81-5P
 866755-28-4P 866755-29-5P 866755-30-8P 890404-11-2P
 890404-12-3P 890404-15-6P 897442-61-4P 944111-44-8P
 944111-45-9P 951694-28-3P 951694-33-0P 951694-34-1P
 951694-35-2P 951694-36-3P 951694-39-6P 951694-41-0P
 951694-44-3P 951694-45-4P 951694-50-1P 951694-59-0P
 951694-60-3P 951694-63-6P 951694-64-7P

(intermediate in monomer preparation; resin compns. containing adamantane structure-containing polybenzoxazoles or polyimides)

IT 846543-82-6P, 9,9-Bis(3-amino-4-hydroxyphenyl)-2,7-bis(phenylethynyl)fluorene 866755-31-9P 890404-07-6P
 890404-08-7P 890404-13-4P 890404-16-7P 890404-31-6P
 890404-39-4P 911222-12-3P 930306-33-5P 942203-43-2P
 942203-44-3P 942203-46-5P 951694-29-4P
 951694-31-8P 951694-37-4P 951694-38-5P 951694-40-9P
 951694-42-1P 951694-43-2P 951694-51-2P 951694-53-4P
 951694-54-5P 951694-55-6P 951694-56-7P 951694-57-8P
 951694-58-9P 951694-61-4P 951694-65-8P

(monomer; resin compns. containing adamantane structure-containing polybenzoxazoles or polyimides)

IT 951694-47-6

(monomer; resin compns. containing adamantane structure-containing polybenzoxazoles or polyimides)

IT 951694-79-4P 951694-84-1P 951694-90-9P 951694-95-4P
 951694-97-6P 951695-13-9P 951695-17-3P 951695-22-0P

951695-27-5P 951695-29-7P 951695-35-5P 951695-39-9P
 951695-44-6P 951695-48-0P 951695-52-6P
 951695-57-1P 951695-61-7P 951695-64-0P 951695-66-2P
 951695-67-3P 951695-69-5P 951695-71-9P 951695-73-1P
 951695-75-3P 951695-77-5P 951695-78-6P
 951695-79-7P 951695-80-0P 951775-18-1P

(precursor; resin compns. containing adamantane structure-containing polybenzoxazoles or polyimides)

IT 951694-80-7P 951694-82-9P 951694-86-3P 951694-88-5P
 951694-92-1P 951694-94-3P 951694-96-5P 951694-98-7P
 951695-00-4P 951695-02-6P 951695-03-7P 951695-05-9P
 951695-07-1P 951695-09-3P 951695-11-7P 951695-19-5P
 951695-25-3P 951695-28-6P 951695-32-2P 951695-41-3P
 951695-46-8P 951695-50-4P 951695-55-9P
 951695-59-3P 951695-63-9P

(resin compns. containing adamantane structure-containing polybenzoxazoles or polyimides)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:813886 HCAPLUS Full-text

DOCUMENT NUMBER: 147:166774

TITLE: Bis(aminophenols) having diamondoid structure for low dielectric polymers

INVENTOR(S): Izumi, Atsushi; Yamanoi, Yumiko; Murata, Mitsuru

PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2007186493	A	20070726	JP 2006-255129	20060921
PRIORITY APPLN. INFO.:			JP 2005-359823	A 20051214

OTHER SOURCE(S): MARPAT 147:166774

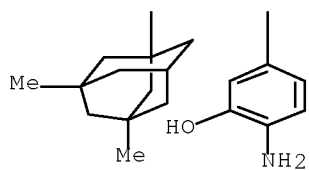
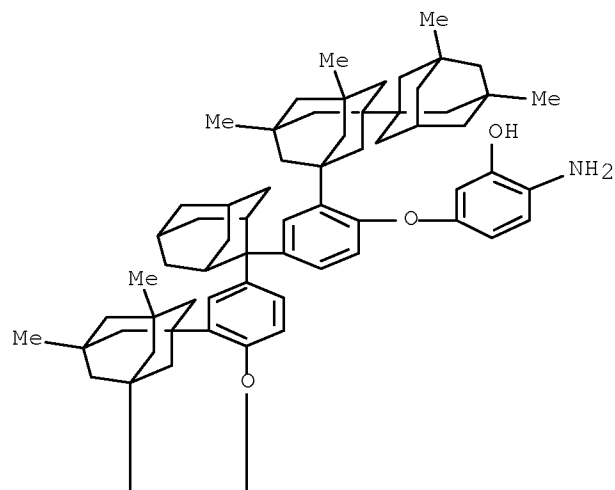
ED Entered STN: 26 Jul 2007

AB Title compds. comprise diamondoid groups substituted with 2 aminohydroxyphenyl groups. Thus, etherification of 3,3'-dibromo-1,1'-biadamantane with PhOH gave 93.7% 3,3'-bis(4-hydroxyphenyl)-1,1'-biadamantane, which was nitrated with and aqueous HNO₃ and hydrogenated over Pd/C to give 3,3'-bis(3-amino-4-hydroxyphenyl)-1,1'-biadamantane, which had specific dielec. constant 2.8.

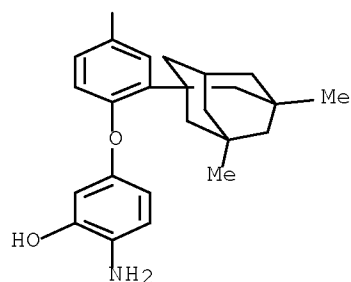
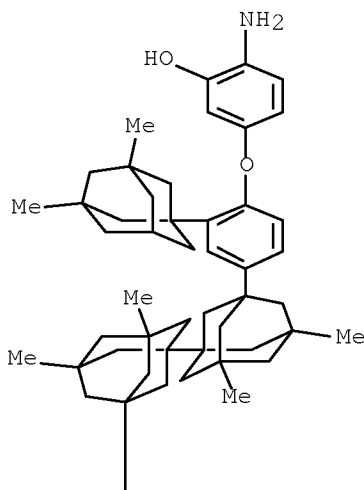
IT 944111-48-2P, [2,2-Bis[4-(4-amino-3-hydroxyphenoxy)-3-[7-[3,3',5,5'-tetramethyl-1,1'-biadamantyl]]phenyl]adamantane
 944111-49-3P, [3,3'-Bis[3-(3,5-dimethyl-1-adamantyl)-4-(4-amino-3-hydroxyphenoxy)phenyl]-5,5',7,7'-tetramethyl-1,1'-biadamantane
 (manufacture of adamantanes substituted with 2 aminohydroxyphenyl groups having diamondoid structure for low dielec. polymers)

RN 944111-48-2 HCAPLUS

CN Phenol, 3,3'-[tricyclo[3.3.1.1^{3,7}]dec-2-ylidenebis[[2-(3',5,5',7-tetramethyl[1,1'-bitricyclo[3.3.1.1^{3,7}]decan]-3-yl)-4,1-phenylene]oxy]]bis[6-amino- (CA INDEX NAME)



RN 944111-49-3 HCAPLUS
 CN Phenol, 3,3'-[(5,5',7,7'-tetramethyl[1,1'-bitricyclo[3.3.1.1.3]decane]-3,3'-diyl)bis[[2-(3,5-dimethyltricyclo[3.3.1.1.3]dec-1-yl)-4,1-phenylene]oxy]]bis[6-amino-(CA INDEX NAME)]



- CC 35-2 (Chemistry of Synthetic High Polymers)
Section cross-reference(s): 25
- IT 897442-30-7P, 3,3'-Bis(3-amino-4-hydroxyphenyl)-1,1'-biadamantane
897442-63-6P, [3,3'-Bis(3-amino-4-hydroxyphenyl)-5,5',7,7'-tetramethyl-1,1'-biadamantane 897442-69-2P,
[3,3'-Bis[4-(4-amino-3-hydroxyphenoxy)phenyl]-1,1'-biadamantane
897442-72-7P, [3,3'-Bis[4-[6-(1-adamantyl)-4-amino-3-hydroxyphenoxy]phenyl]-1,1'-biadamantane 897442-80-7P,
3,3'-Bis[4-(4-amino-3-hydroxyphenoxy)phenyl]-5,5',7,7'-tetramethyl-1,1'-biadamantane 897442-86-3P,
[3,3'-Bis[4-[4-amino-3-hydroxy-6-(3,5-dimethyl-1-adamantyl)phenoxy]phenyl]-5,5',7,7'-tetramethyl-1,1'-biadamantane
930306-33-5P, [3,3'-Bis[3-amino-4-hydroxy-5-(3,5-dimethyl-1-adamantyl)phenyl]-5,5',7,7'-tetramethyl-1,1'-biadamantane
930306-35-7P, [3,3'-Bis[3-amino-4-hydroxy-5-[3-(5,5',7,7'-tetramethyl-1,1'-biadamantyl)]phenyl]-5,5',7,7'-tetramethyl-1,1'-biadamantane
930306-37-9P, [2,2-Bis[5-amino-4-hydroxy-3-(3,5-dimethyl-1-adamantyl)phenyl]adamantane 930306-39-1P,
[2,2-Bis[5-amino-4-hydroxy-3-[7-[3,3',5,5'-tetramethyl-1,1'-biadamantyl]]phenyl]adamantane 944111-46-0P,

[2,2-Bis[4-(4-amino-3-hydroxyphenoxy)-3-(3,5-dimethyl-1-adamantyl)phenyl]adamantane 944111-47-1P,
 [2,2-Bis[4-[4-amino-5-hydroxy-2-(3,5-dimethyl-1-adamantyl)phenoxy]-3-(3,5-dimethyl-1-adamantyl)phenyl]adamantane 944111-48-2P,
 [2,2-Bis[4-(4-amino-3-hydroxyphenoxy)-3-[7-[3,3',5,5'-tetramethyl-1,1'-biadamantyl]]phenyl]adamantane 944111-49-3P,
 [3,3'-Bis[3-(3,5-dimethyl-1-adamantyl)-4-(4-amino-3-hydroxyphenoxy)phenyl]-5,5',7,7'-tetramethyl-1,1'-biadamantane
 (manufacture of adamantanes substituted with 2 aminohydroxyphenyl groups having diamondoid structure for low dielec. polymers)

L31 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:754494 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 147:166761

TITLE: 3,3',5,5'-tetrakis[4-(aminohydroxyphenoxy)phenyl]-1,1'-biadamantanes for low-dielectric-constant resins

INVENTOR(S): Sano, Yoko

PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

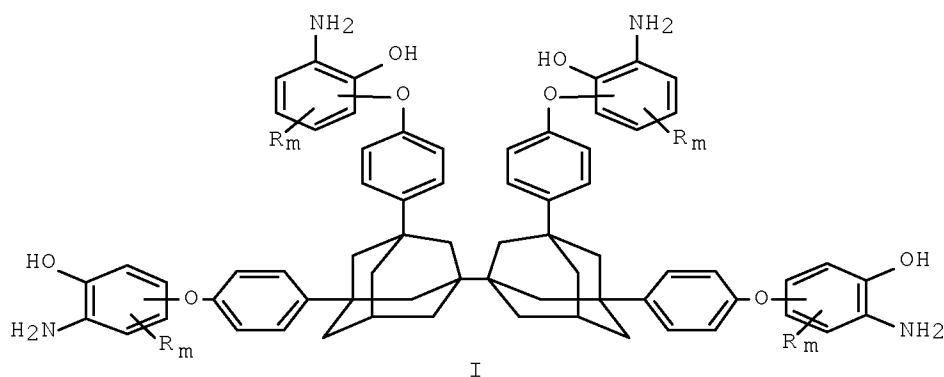
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2007176805	A	20070712	JP 2005-373930	20051227
PRIORITY APPLN. INFO.:			JP 2005-373930	20051227

ED Entered STN: 12 Jul 2007

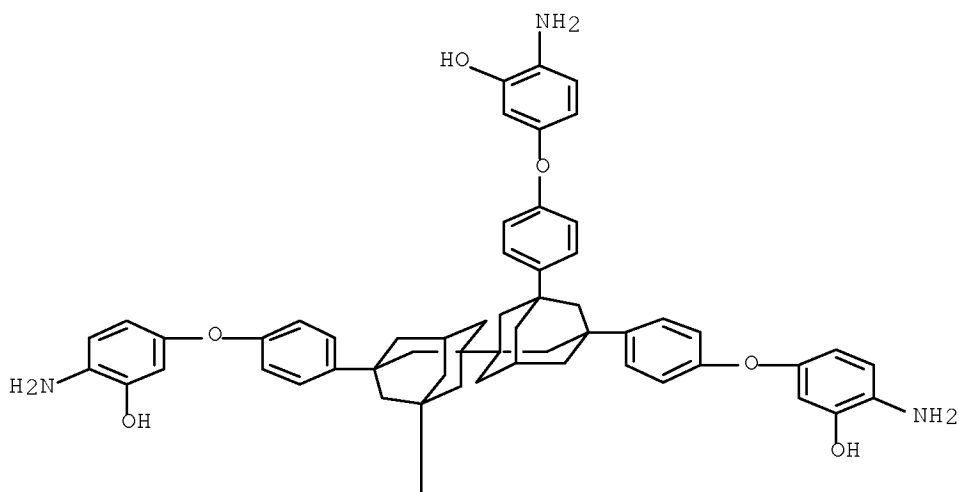
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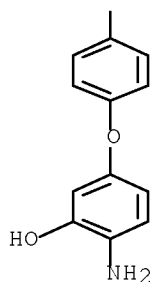
AB The biadamantanes are I (R = group with diamondoid structure, m = 0-10). Thus, 1-bromoadamantane was coupled with Mg, brominated, treated with PhOH in the presence of FeCl₃, treated with 2-benzyloxy-4-fluoronitrobenzene, and hydrogenated to give 3,3',5,5'-tetrakis [4-(4-amino-3-hydroxyphenoxy)phenyl]-1,1'- biadamantane.

IT 920742-39-8P
 (manufacture of tetrakis[(aminohydroxyphenoxy)phenyl]biadamantanes for
 low-dielec.-constant resins)
 RN 920742-39-8 HCAPLUS
 CN Phenol, 3,3',3'',3'''-[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3',5,5'-
 tetrayltetrakis(4,1-phenyleneoxy)]tetrakis[6-amino- (CA INDEX NAME)

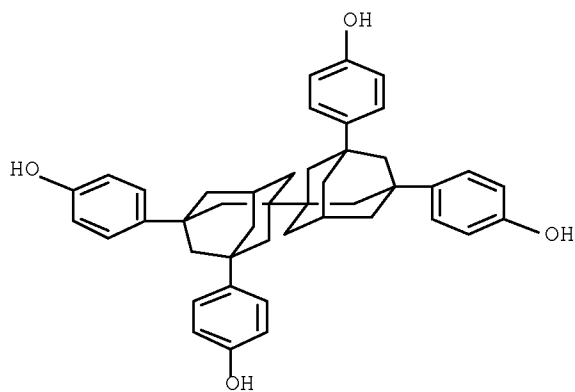
PAGE 1-A



PAGE 2-A

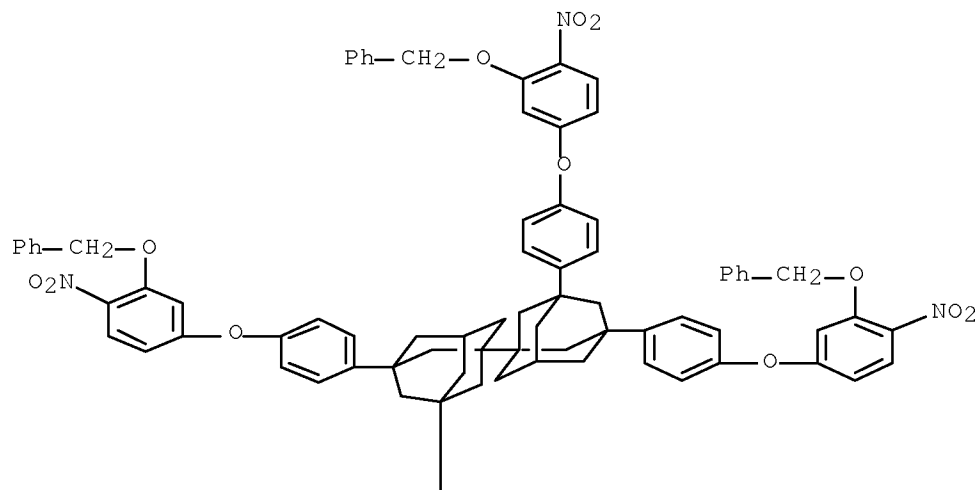


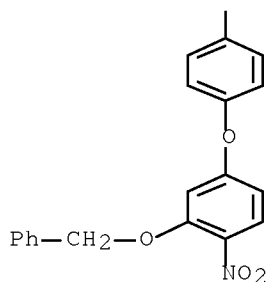
IT 916645-89-1P 943817-01-4P
 (manufacture of tetrakis[(aminohydroxyphenoxy)phenyl]biadamantanes for
 low-dielec.-constant resins)
 RN 916645-89-1 HCAPLUS
 CN Phenol, 4,4',4'',4'''-[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3',5,5'-
 tetrayltetrakis- (CA INDEX NAME)



RN 943817-01-4 HCAPLUS
 CN 1,1'-Bitricyclo[3.3.1.1.3,7]decane,
 3,3',5,5'-tetrakis[4-[4-nitro-3-(phenylmethoxy)phenoxy]phenyl]- (CA
 INDEX NAME)

PAGE 1-A





CC 35-2 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 25, 76
 IT 920742-39-8P
 (manufacture of tetrakis[(aminohydroxyphenoxy)phenyl]biadamantanes for
 low-dielec.-constant resins)
 IT 916645-89-1P 943817-01-4P
 (manufacture of tetrakis[(aminohydroxyphenoxy)phenyl]biadamantanes for
 low-dielec.-constant resins)

L31 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:726475 HCAPLUS Full-text
 DOCUMENT NUMBER: 147:118617
 TITLE: Tetrakis(aminophenols) having diamondoid structure
 as materials for polymers with low dielectric
 constant
 INVENTOR(S): Harada, Takahiro
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 17pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

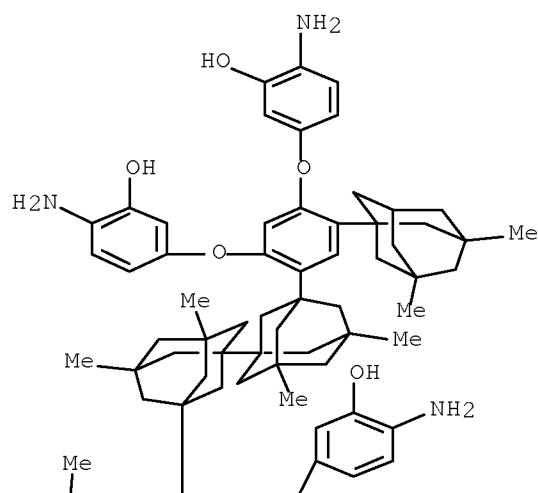
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007169236	A	20070705	JP 2005-371687	20051226
PRIORITY APPLN. INFO.:			JP 2005-371687	20051226

OTHER SOURCE(S): MARPAT 147:118617
 ED Entered STN: 05 Jul 2007
 AB Claimed are title compds., preferably OH and NH2 are at the ortho position.
 Thus, 1,3-dihydroxybenzene was reacted with 5,5',7,7'-tetramethyl-3,3'-
 dibromobiadamantane, 1-bromo-3,5-dimethyladamantane, 2-benzyloxy-4-
 fluoronitrobenzene, and deprotected to give 5,5',7,7'-tetramethyl-3,3'-bis[3-
 (3,5-dimethyl-1- adamantyl)-4,6-(4-amino-3-hydroxyphenoxy)phenyl]-1,1'-
 biadamantane, which exhibited specific dielec. constant 2.75.
 IT 942936-21-2P 942936-22-3P 942936-23-4P
 942936-24-5P 942936-29-0P 942936-30-3P
 942936-31-4P 942936-32-5P
 (preparation of tetrakis(aminophenol)-modified adamantanes as materials
 for polymers with low dielec. constant)
 RN 942936-21-2 HCAPLUS
 CN Phenol, 3,3',3'',3'''-[(5,5',7,7'-tetramethyl[1,1'-
 bitricyclo[3.3.1.1.3,7]decane]-3,3'-diyl)bis[[5-(3,5-

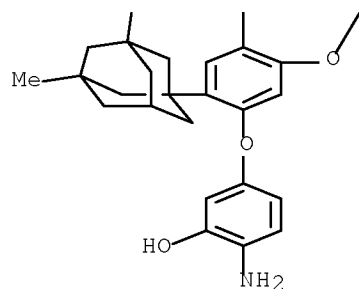
10/531,208

dimethyltricyclo[3.3.1.1^{3,7}]dec-1-yl)-1,2,4-
benzenetriyl]bis(oxy)]tetrakis[6-amino- (CA INDEX NAME)

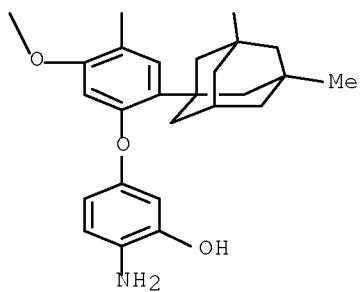
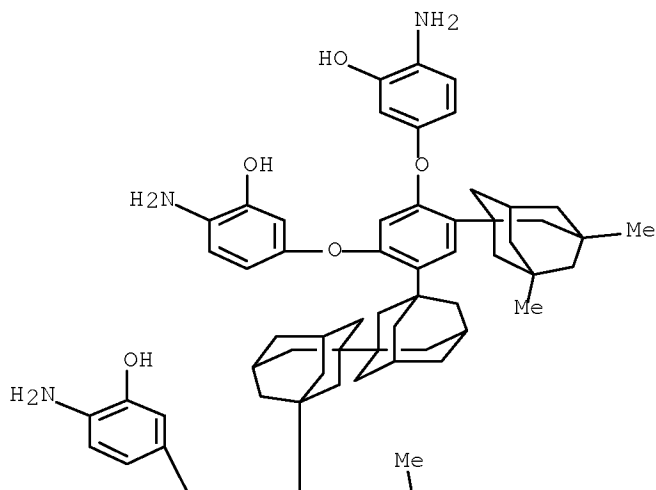
PAGE 1-A



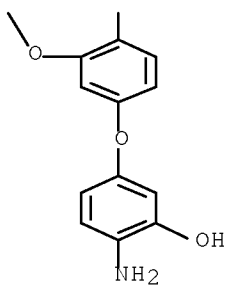
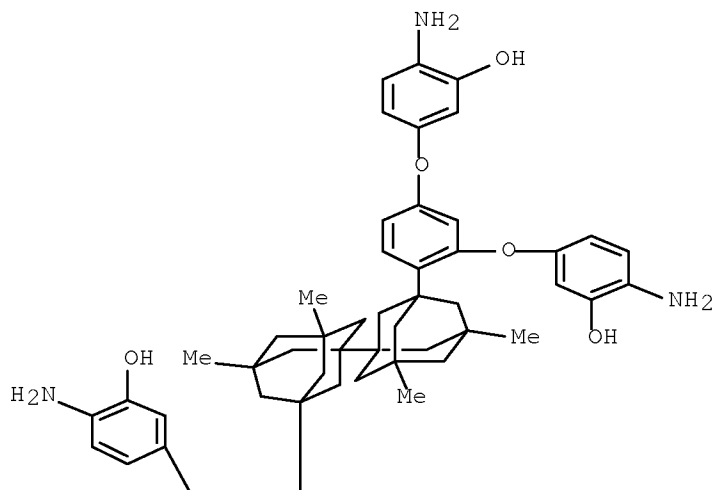
PAGE 2-A



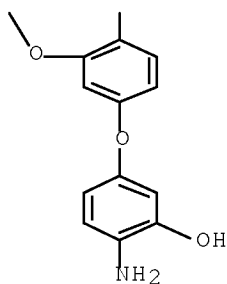
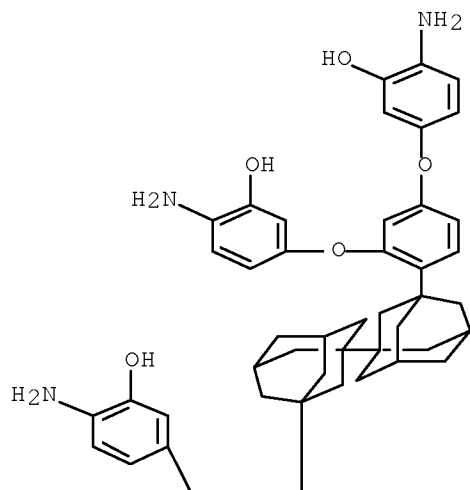
RN 942936-22-3 HCAPLUS
CN Phenol, 3,3',3'',3'''-[[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3'-
diylbis[[5-(3,5-dimethyltricyclo[3.3.1.1^{3,7}]dec-1-yl)-1,2,4-
benzenetriyl]bis(oxy)]tetrakis[6-amino- (CA INDEX NAME)



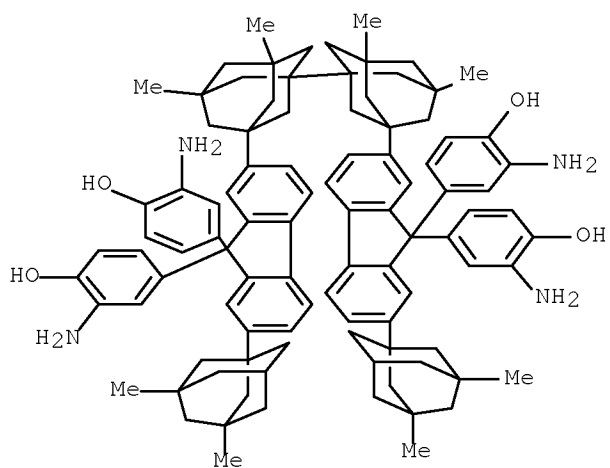
RN 942936-23-4 HCAPLUS
 CN Phenol, 3,3',3'',3'''-[(5,5',7,7'-tetramethyl[1,1'-
 bitricyclo[3.3.1.1^{3,7}]decane]-3,3'-diyl)bis[1,2,4-
 benzenetriylbis(oxy)]]tetrakis[6-amino- (CA INDEX NAME)



RN 942936-24-5 HCAPLUS
 CN Phenol, 3,3',3'',3'''-[[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3'-
 diylbis[1,2,4-benzenetriylbis(oxy)]]tetrakis[6-amino- (CA INDEX NAME)



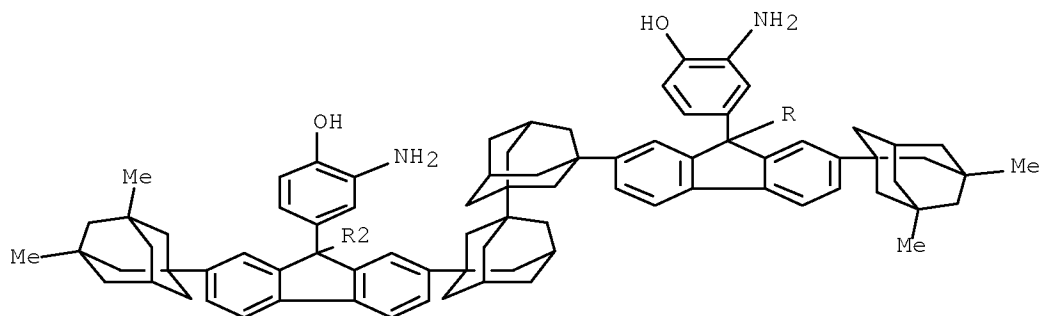
RN 942936-29-0 HCAPLUS
 CN Phenol, 4,4',4'',4'''-[(5,5',7,7'-tetramethyl[1,1'-
 bitricyclo[3.3.1.1.3,7]decane]-3,3'-diyl)bis[7-(3,5-
 dimethyltricyclo[3.3.1.1.3,7]dec-1-yl)-9H-fluoren-2-yl-9-
 ylidene]]tetrakis[2-amino- (CA INDEX NAME)



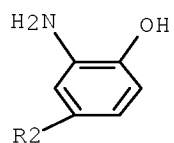
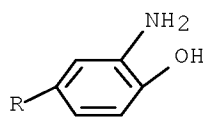
RN 942936-30-3 HCAPLUS

CN Phenol, 4,4',4'',4'''-[[[1,1'-bitricyclo[3.3.1.1³,7]decane]-3,3'-diylbis[7-(3,5-dimethyltricyclo[3.3.1.1³,7]dec-1-yl)-9H-fluoren-2-yl-9-ylidene]]tetrakis[2-amino- (CA INDEX NAME)

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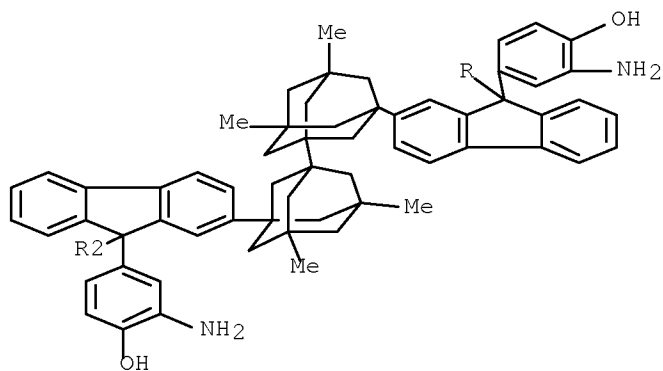
PAGE 2-A



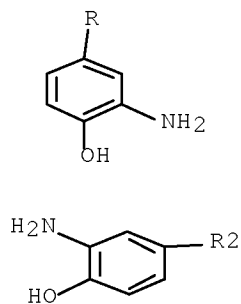
10/531,208

RN 942936-31-4 HCAPLUS
 CN Phenol, 4,4',4'',4'''-[(5,5',7,7'-tetramethyl[1,1'-bitricyclo[3.3.1.1.3,7]decane]-3,3'-diyl)di-9H-fluoren-2-yl-9-ylidene]tetrakis[2-amino- (CA INDEX NAME)

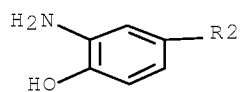
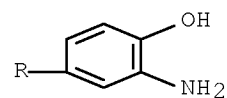
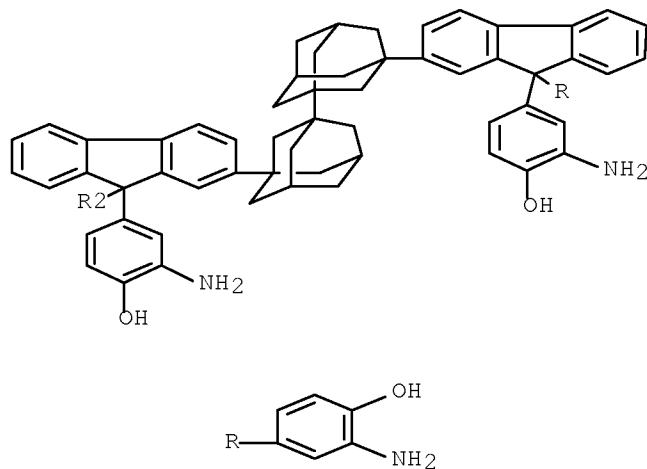
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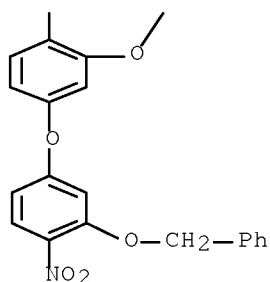
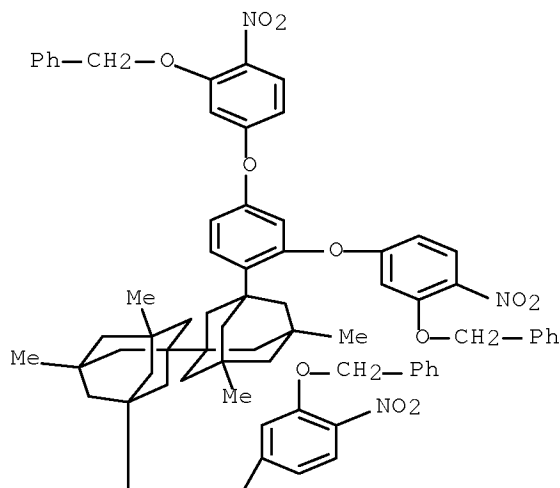
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RN 942936-32-5 HCAPLUS
 CN Phenol, 4,4',4'',4'''-([1,1'-bitricyclo[3.3.1.1.3,7]decane]-3,3'-diyl)di-9H-fluoren-2-yl-9-ylidene)tetrakis[2-amino- (CA INDEX NAME)



IT 942936-16-5P
 (preparation of tetrakis(aminophenol)-modified adamantanes as materials
 for polymers with low dielec. constant)
 RN 942936-16-5 HCAPLUS
 CN 1,1'-Bitricyclo[3.3.1.1^{3,7}]decane,
 3,3'-bis[2,4-bis[4-nitro-3-(phenylmethoxy)phenoxy]phenyl]-5,5',7,7'-
 tetramethyl- (CA INDEX NAME)



CC 35-2 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 25, 76

IT 942936-21-2P 942936-22-3P 942936-23-4P
 942936-24-5P 942936-25-6P 942936-26-7P 942936-27-8P
 942936-28-9P 942936-29-0P 942936-30-3P
 942936-31-4P 942936-32-5P
 (preparation of tetrakis(aminophenol)-modified adamantanes as materials
 for polymers with low dielec. constant)

IT 942936-15-4P 942936-16-5P 942936-17-6P 942936-18-7P
 942936-19-8P 942936-20-1P
 (preparation of tetrakis(aminophenol)-modified adamantanes as materials
 for polymers with low dielec. constant)

L31 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:696990 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 147:96045
 TITLE: Diamondoid structure-containing aromatic
 carboxylic acids and their chlorides
 INVENTOR(S): Yamanoi, Yumiko
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2007161625	A	20070628	JP 2005-358323	20051212
PRIORITY APPLN. INFO.:			JP 2005-358323	20051212

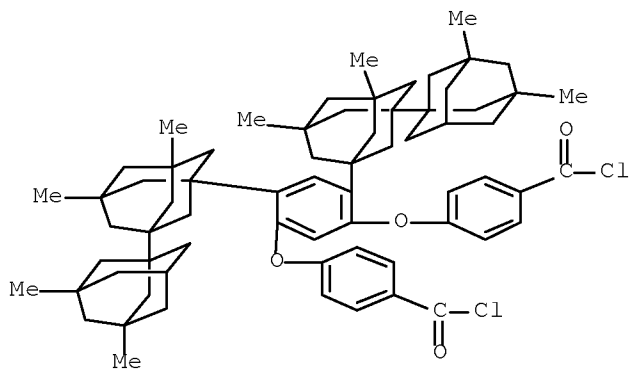
OTHER SOURCE(S): MARPAT 147:96045

ED Entered STN: 28 Jun 2007

AB The carboxylic acids, useful as monomers for low-dielec.-constant resins, are $\text{RmAr}(\text{OC}_6\text{H}_4\text{CO}_2\text{H})_2$ (R = group comprising diamondoid structure; Ar = aromatic group; m = 0-20). Thus, 1-bromoadamantane was successively treated with 1,3-dihydroxybenzene and 4-bromobenzonitrile, and reduced to give 4,6-di(1-adamantyl)-1,3-bis(4-carboxyphenoxy)benzene, which was treated with SOCl_2 to give 4,6-di(1-adamantyl)-1,3-bis(4-chlorocarbonylphenoxy)benzene.

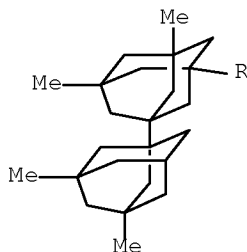
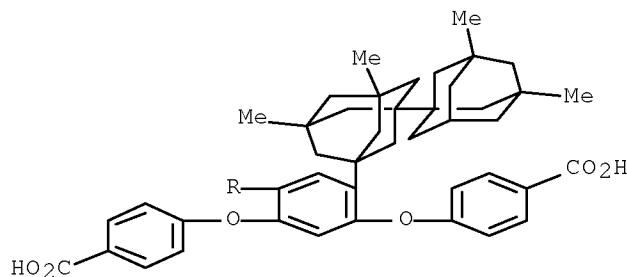
IT 942203-46-5P

(manufacture of diamondoid structure-containing aromatic carboxylic acids and their chlorides as monomers for low-dielec.-constant resins)
 RN 942203-46-5 HCAPLUS
 CN Benzoyl chloride, 4,4'-[[4,6-bis(3',5,5',7-tetramethyl[1,1'-bitricyclo[3.3.1.1^{3,7}]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis- (CA INDEX NAME)



IT 942203-45-4P

(manufacture of diamondoid structure-containing aromatic carboxylic acids and their chlorides as monomers for low-dielec.-constant resins)
 RN 942203-45-4 HCAPLUS
 CN Benzoic acid, 4,4'-[[4,6-bis(3',5,5',7-tetramethyl[1,1'-bitricyclo[3.3.1.1^{3,7}]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis- (CA INDEX NAME)



CC 35-2 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 25

IT 942203-43-2P 942203-44-3P 942203-46-5P 942203-49-8P
942203-51-2P

(manufacture of diamondoid structure-containing aromatic carboxylic acids

and

their chlorides as monomers for low-dielec.-constant resins)

IT 367279-75-2P 890404-36-1P 920742-37-6P 942203-41-0P
942203-42-1P 942203-45-4P 942203-47-6P 942203-48-7P
942203-50-1P

(manufacture of diamondoid structure-containing aromatic carboxylic acids

and

their chlorides as monomers for low-dielec.-constant resins)

L31 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:86095 HCAPLUS Full-text

DOCUMENT NUMBER: 146:164327

TITLE: Benzoxazole precursors, polymer compositions and
coating varnishes containing them with excellent
storage stability and solubility, and films and
semiconductor devices using them

INVENTOR(S): Enoki, Naoshi; Harada, Takahiro; Sano, Yoko

PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007016223	A	20070125	JP 2006-159016	20060607
PRIORITY APPLN. INFO.:			JP 2005-168846	A 20050608

ED Entered STN: 25 Jan 2007

AB The precursors, useful for interlayer dielects. and protective films, contain compds. bearing ≥ 5 in total of ≥ 2 o-aminophenol groups and ≥ 2 carboxylic acid groups. Thus, a precursor prepared from 1,3,5-tris(3-amino-4-hydroxyphenoxy)adamantane, 5,5',7,7'-tetramethyl-1,1'-biadamantyl-3,3'-dicarboxylic dichloride, and benzoyl chloride gave a thermally cured film with thermal decomposition temperature 536° and dielec. constant 2.2.

IT 920511-54-2DP, reaction products with 3,5-dimethyladamantylcarboxylic acid chloride 920511-58-6DP, reaction products with 3,5-dimethyladamantylcarboxylic acid chloride (film; storage-stable polybenzoxazole precursor varnishes for dielec. films for semiconductor devices)

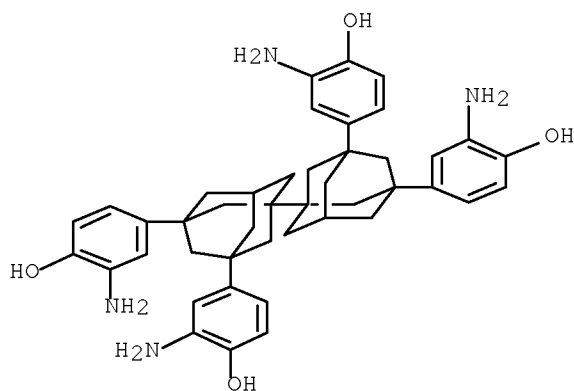
RN 920511-54-2 HCAPLUS

CN Tricyclo[3.3.1.1^{3,7}]decane-1,3,5,7-tetracarbonyl tetrachloride, polymer with 4,4',4'',4'''-[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3',5,5'-tetrayltetrakis[2-aminophenol] (CA INDEX NAME)

CM 1

CRN 920511-53-1

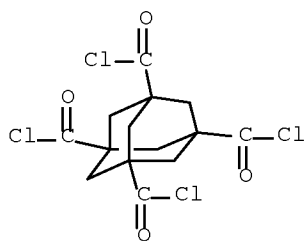
CMF C44 H50 N4 O4



CM 2

CRN 137494-82-7

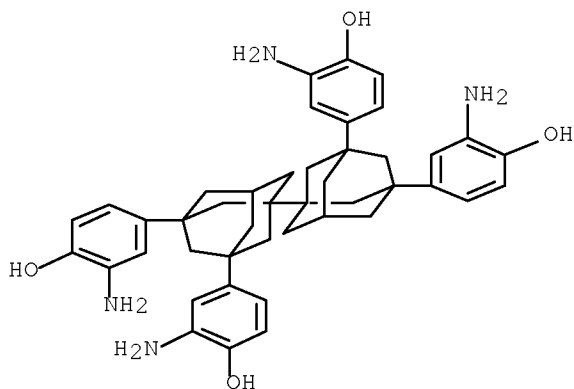
CMF C14 H12 C14 O4



RN 920511-58-6 HCAPLUS
 CN [1,1'-Bitricyclo[3.3.1.1.3,7]decane]-3,3',5,5'-tetracarboxyl
 tetrachloride, polymer with 4,4',4'',4'''-[1,1'-
 bitricyclo[3.3.1.1.3,7]decane]-3,3',5,5'-tetrayltetrakis[2-aminophenol]
 (CA INDEX NAME)

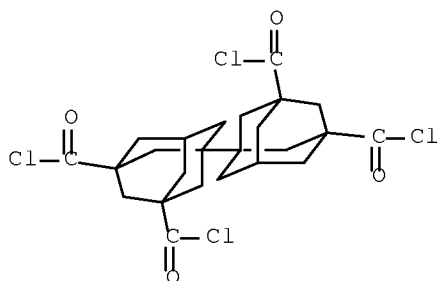
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CRN 920511-53-1
 CMF C44 H50 N4 O4

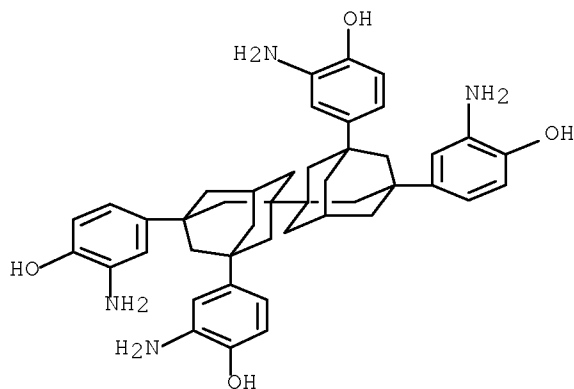


CM 2

CRN 41826-67-9
 CMF C24 H26 Cl4 O4



- IT 920511-53-1P, 3,3',5,5'-Tetrakis(3-amino-4-hydroxyphenyl)1,1'-biadamantane
(for precursor preparation; storage-stable polybenzoxazole precursor varnishes for dielec. films for semiconductor devices)
- RN 920511-53-1 HCAPLUS
- CN Phenol, 4,4',4'',4'''-[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3',5,5'-tetrayl]tetrakis[3-amino- (CA INDEX NAME)



- CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76
- IT 95-55-6DP, 2-Aminophenol, reaction products with polybenzoxazole precursor 98-88-4DP, Benzoyl chloride, reaction products with polybenzoxazole precursor 3124-87-6DP, 3,5-Dimethyladamantyl-1-carboxylic acid chloride, reaction products with polybenzoxazole precursor 920511-51-9DP, reaction products with benzoyl chloride 920511-52-0DP, reaction products with aminophenol 920511-54-2DP, reaction products with 3,5-dimethyladamantylcarboxylic acid chloride 920511-56-4DP, 3-Phenylethynylbenzoyl chloride, reaction products with polybenzoxazole precursor 920511-57-5DP, reaction products with phenylethynylbenzoyl chloride 920511-58-6DP, reaction products with 3,5-dimethyladamantylcarboxylic acid chloride 920511-59-7DP, reaction products with phenylethynylbenzoyl chloride (film; storage-stable polybenzoxazole precursor varnishes for dielec. films for semiconductor devices)
- IT 41826-67-9P, 1,1'-Biadamantyl-3,3',5,5'-tetracarboxylic acid tetrachloride 63263-14-9P, 3,3'-Dibromo-5,5',7,7'-tetramethyl-1,1'-biadamantane 100884-80-8P, Adamantyl-1,3,5,7-tetracarboxylic acid tetrachloride 137494-82-7P, Adamantyl-1,3,5,7-tetracarboxylic acid tetrachloride 150785-12-9P, 3,3',5,5'-Tetrabromo-1,1'-biadamantane 393543-14-1P, 5-Phenylethynylisophthalic acid dichloride 890404-31-6P, Bis[1,3-(4-amino-3-hydroxyphenoxy)]-4,6-bis(3,5-dimethyl-1-adamantyl)benzene 890404-32-7P, 2-Benzyloxy-4-fluoro-5-(3,5-dimethyl-1-adamantyl)nitrobenzene 890404-33-8P, 1,3-Bis[6-(3,5-dimethyl-1-adamantyl)-4-amino-3-hydroxyphenoxy]-4,6-bis(3,5-dimethyl-1-adamantyl)benzene 897442-64-7P, 5,5',7,7'-Tetramethyl-1,1'-biadamantyl-3,3'-dicarboxylic acid 897442-65-8P, 5,5',7,7'-Tetramethyl-1,1'-biadamantyl-3,3'-

dicarboxylic acid dichloride 920511-50-8P,
 1,3,5-Tris(3-amino-4-hydroxyphenyl)adamantane 920511-53-1P,
 3,3',5,5'-Tetrakis(3-amino-4-hydroxyphenyl)1,1'-biadamantane
 920511-55-3P, 4,6-Bis(3,5-dimethyladamantyl)resorcinol
 (for precursor preparation; storage-stable polybenzoxazole precursor
 varnishes for dielec. films for semiconductor devices)

L31 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:86060 HCAPLUS Full-text

DOCUMENT NUMBER: 146:164326

TITLE: Benzoxazole precursors, polymer compositions and
 coating varnishes containing them with excellent
 storage stability and solubility, and films and
 semiconductor devices using them

INVENTOR(S): Murata, Mitsuru; Izumi, Atsushi; Yamanoi, Yumiko

PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 22pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2007016220	A	20070125	JP 2006-158352	20060607
PRIORITY APPLN. INFO.:			JP 2005-168845	A 20050608

ED Entered STN: 25 Jan 2007

AB The precursors, useful for interlayer dielects. and protective films, contain
 compds. bearing ≥ 3 in total of o-aminophenol groups and carboxylic acid
 groups. Thus, a precursor prepared from 5-[4-(3-hydroxy-4-amino-
 phenoxy)phenyl]-adamantyl-1,3-dicarboxylic acid and 2-amino-4-(3,5-dimethyl-1-
 adamantyl)phenol gave a thermally cured film with thermal decomposition
 temperature 523° and dielec. constant 2.4.

IT 920742-40-1DP, reaction products with
 5-phenylethynylisophthalic acid
 (film; storage-stable polybenzoxazole precursor varnishes for
 dielec. films for semiconductor devices)

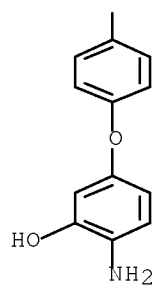
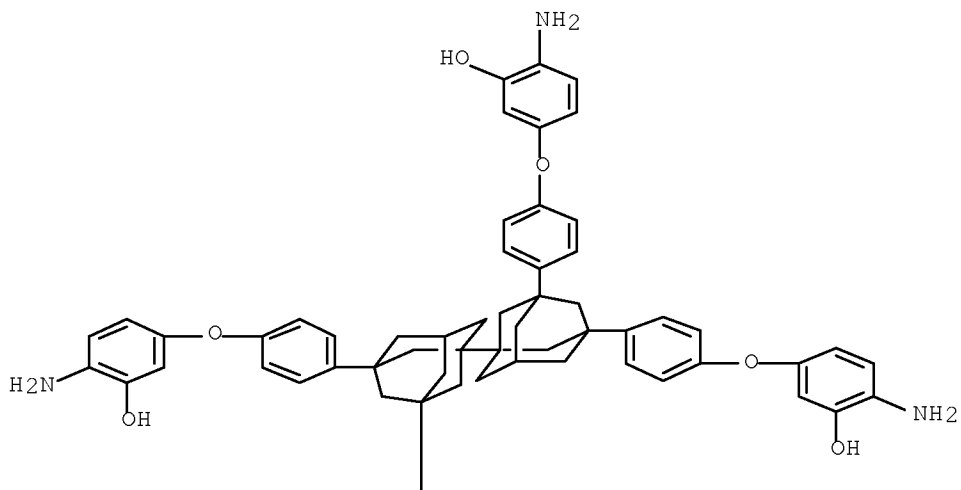
RN 920742-40-1 HCAPLUS

CN Benzoic acid, 3,5-bis[5-amino-2-(3,5-dimethyltricyclo[3.3.1.1^{3,7}]dec-1-
 yl)-4-hydroxyphenoxy]-, polymer with
 3,3',3'',3'''-[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3',5,5'-
 tetrayltetrakis(4,1-phenyleneoxy)]tetrakis[6-aminophenol] (CA INDEX
 NAME)

CM 1

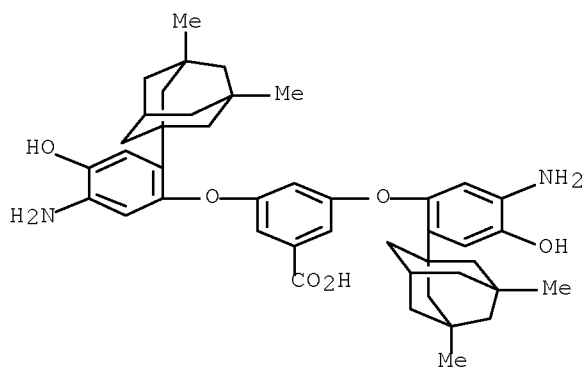
CRN 920742-39-8

CMF C68 H66 N4 O8



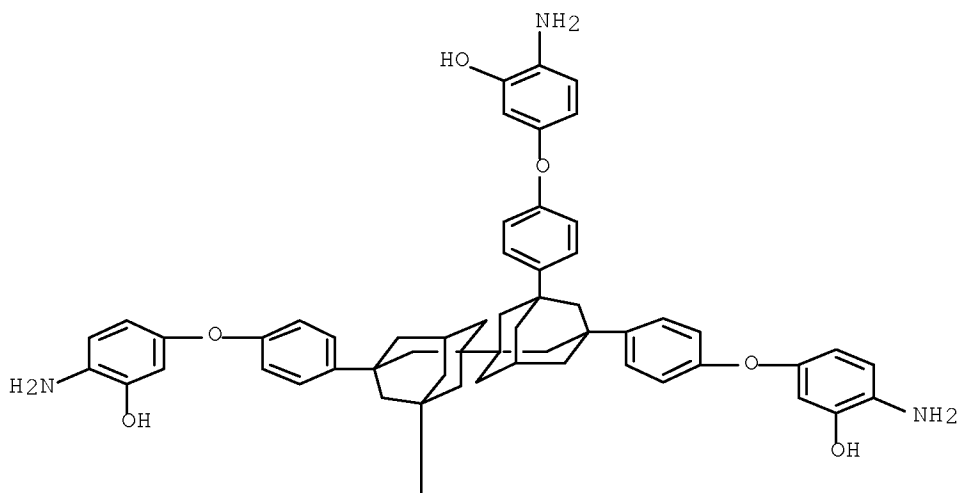
CM 2

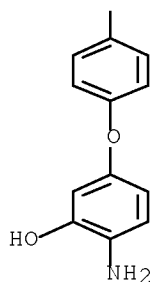
CRN 920742-33-2
CMF C43 H52 N2 O6



IT 920742-39-8P, 3,3',5,5'-Tetrakis[4-(3-hydroxy-4-aminophenoxy)phenyl]-1,1'-biadamantane
 (for precursor preparation; storage-stable polybenzoxazole precursor
 varnishes for dielec. films for semiconductor devices)
 RN 920742-39-8 HCAPLUS
 CN Phenol, 3,3',3'',3'''-[[1,1'-bitricyclo[3.3.1.1.3,7]decane]-3,3',5,5'-
 tetrayltetrakis(4,1-phenyleneoxy)]tetrakis[6-amino- (CA INDEX NAME)

PAGE 1-A



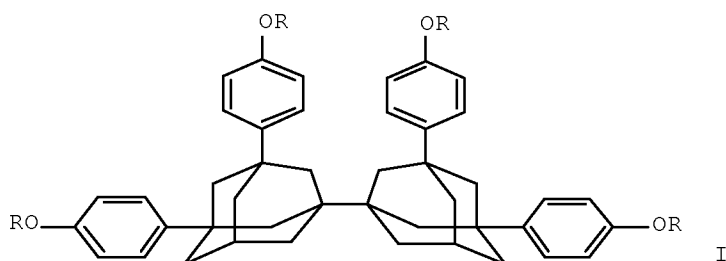


- CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 25, 76
- IT 65-85-0DP, Benzoic acid, reaction products with polybenzoxazole precursor 95-55-6DP, 2-Aminophenol, reaction products with polybenzoxazole precursor 14670-94-1DP, 3,5-Dimethyladamantylcarboxylic acid, reaction products with polybenzoxazole precursor 432025-99-5DP, 5-Phenylethynylisophthalic acid, reaction products with polybenzoxazole precursor 920742-31-0DP, 2-Amino-4-(3,5-dimethyl-1-adamantyl)phenol, reaction products with polybenzoxazole precursor 920742-32-1DP, reaction products with 2-amino-4-(3,5-dimethyl-1-adamantyl)phenol 920742-34-3DP, 3,5-Bis[3-hydroxy-4-amino-6-(3,5-dimethyl-1-adamantyl)phenoxy]benzoic acid homopolymer, reaction products with 3,5-dimethyladamantylcarboxylic acid 920742-35-4DP, reaction products with 2-aminophenol 920742-36-5DP, reaction products with 2-aminophenol or 5-phenylethynylisophthalic acid 920742-38-7DP, reaction products with benzoic acid 920742-40-1DP, reaction products with 5-phenylethynylisophthalic acid (film; storage-stable polybenzoxazole precursor varnishes for dielec. films for semiconductor devices)
- IT 41826-66-8P, 1,1'-Biadamantyl-3,3',5,5'-tetracarboxylic acid 150785-12-9P, 3,3',5,5'-Tetrabromo-1,1'-biadamantane 890404-31-6P, 4,6-Bis(3,5-dimethyl-1-adamantyl)-1,3-bis(3-hydroxy-4-aminophenoxy)benzene 890404-32-7P, 2-Benzyloxy-4-fluoro-5-(3,5-dimethyl-1-adamantyl)nitrobenzene 920511-55-3P, 4,6-Bis(3,5-dimethyladamantyl)resorcinol 920742-29-6P 920742-30-9P, 5-[4-(3-Hydroxy-4-aminophenoxy)phenyl]adamantyl-1,3-dicarboxylic acid 920742-31-0P, 2-Amino-4-(3,5-dimethyl-1-adamantyl)phenol 920742-33-2P, 3,5-Bis[3-hydroxy-4-amino-6-(3,5-dimethyl-1-adamantyl)phenoxy]benzoic acid 920742-37-6P, 4,6-Bis(3,5-dimethyl-1-adamantyl)-1,3-bis(4-carboxyphenoxy)benzene 920742-39-8P, 3,3',5,5'-Tetrakis[4-(3-hydroxy-4-aminophenoxy)phenyl]-1,1'-biadamantane (for precursor preparation; storage-stable polybenzoxazole precursor varnishes for dielec. films for semiconductor devices)
- L31 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1332629 HCAPLUS Full-text
DOCUMENT NUMBER: 146:63254
TITLE: Biadamantanetetraphenols
INVENTOR(S): Nakai, Yasuto; Maeda, Shigehiro; Nakai, Toru; Kamuro, Yoshiaki; Harada, Takahiro; Sano, Yoko
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan; Sumitomo Bakelite Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 7pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2006342094	A	20061221	JP 2005-168733	20050608
PRIORITY APPLN. INFO.:			JP 2005-168733	20050608

OTHER SOURCE(S): MARPAT 146:63254
 ED Entered STN: 21 Dec 2006
 GI

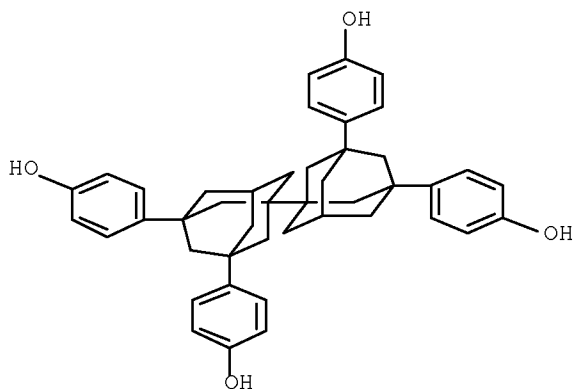


AB Title compds., useful for polymers for electronic or optical parts, liquid crystal alignment films, etc., are I (R = H, protective group, atom or atomic group for forming salt; positions adjacent to OR may be substituted with halo and/or amino). Thus, 3,3',5,5'-tetrabromo-1,1'-biadamantane was treated with PhOH to give 70% 3,3',5,5'-tetrakis(4-hydroxyphenyl)-1,1'-biadamantane.

IT 916645-89-1P
 (manufacture of biadamantanetetrapienols)

RN 916645-89-1 HCAPLUS

CN Phenol, 4,4',4'',4'''-[1,1'-bitricyclo[3.3.1.1^{3,7}]decane]-3,3',5,5'-tetrayltetrakis- (CA INDEX NAME)



CC 35-2 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 25
 IT 916645-89-1P
 (manufacture of biadamantanetetraphenols)

L31 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:1090752 HCAPLUS Full-text
 DOCUMENT NUMBER: 145:439514
 TITLE: Polybenzoxazole precursors, polybenzoxazoles from
 them with excellent heat resistance and dielectric
 properties, and varnishes, films, and
 semiconductor devices using them
 INVENTOR(S): Oki, Hiromi; Enoki, Naoshi
 PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 27pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2006282815	A	20061019	JP 2005-103569	20050331
PRIORITY APPLN. INFO.:			JP 2005-103569	20050331

ED Entered STN: 19 Oct 2006

AB The precursors, useful for interlayer dielects., surface protecting films, and etching stopper films, are obtained by reacting dianilines (Me₃COCOC₂Q)2X (Q = aminophenylene; X = C-containing organic group, O) and dicarboxylic acids. Thus, a polyamide from 9,9-bis[(3-amino-4-tert-butoxycarbonyloxy)phenyl]fluorene and 3,3'-(5,5',7,7'-tetramethyl-1,1'-biadamantane)dicarboxylic acid dichloride gave a film with glass-transition temperature 413°, heat decomposition temperature 527°, and dielec. constant 2.71.

IT 912818-94-1P 912818-96-3P

(butoxycarbonyloxy-containing polyamides for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)

RN 912818-94-1 HCAPLUS

CN Poly[oxy[4,6-bis([1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]oxy[3-[[[(1,1-dimethylethoxy)carbonyl]oxy]-1,4-phenylene]iminocarbonyl-1,3-phenylenecarbonylimino[2-[[[(1,1-dimethylethoxy)carbonyl]oxy]-1,4-phenylene]] (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

RN 912818-96-3 HCAPLUS

CN Poly[oxy[4,6-bis([1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]oxy[3-[[[(1,1-dimethylethoxy)carbonyl]oxy]-1,4-phenylene]iminocarbonyl(5,5',7,7'-tetramethyl[1,1'-bitricyclo[3.3.1.1³,7]decane]-3,3'-diyl)carbonylimino[2-[[[(1,1-

10/531,208

dimethylethoxy)carbonyl]oxy]-1,4-phenylene]] (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

IT 912818-93-0P 912818-95-2P

(butoxycarbonyloxy-containing polyamides for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)

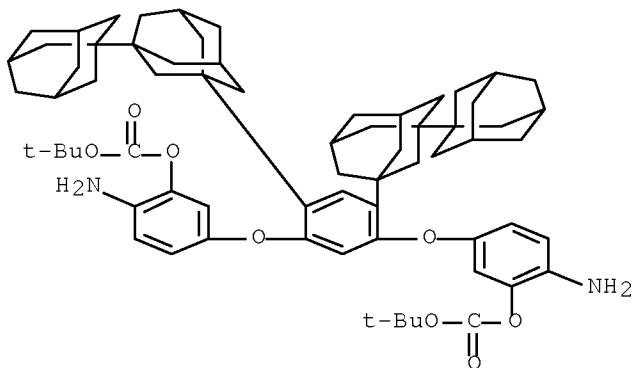
RN 912818-93-0 HCAPLUS

CN Carbonic acid, [4,6-bis([1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]bis[oxy(6-amino-3,1-phenylene)] bis(1,1-dimethylethyl) ester, polymer with 1,3-benzenedicarbonyl dichloride (9CI) (CA INDEX NAME)

CM 1

CRN 912818-88-3

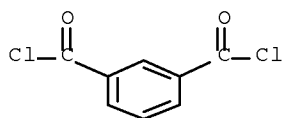
CMF C68 H88 N2 O8



CM 2

CRN 99-63-8

CMF C8 H4 Cl2 O2



RN 912818-95-2 HCAPLUS

CN Carbonic acid, [4,6-bis([1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-

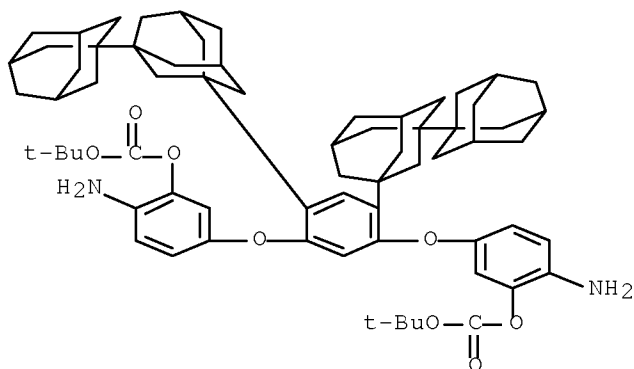
10/531,208

phenylene]bis[oxy(6-amino-3,1-phenylene)] bis(1,1-dimethylethyl)
 ester, polymer with 5,5',7,7'-tetramethyl[1,1'-
 bitricyclo[3.3.1.1.3,7]decane]-3,3'-dicarbonyl dichloride (9CI) (CA
 INDEX NAME)

CM 1

CRN 912818-88-3

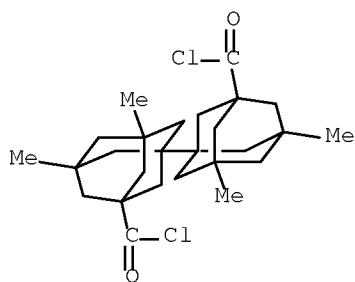
CMF C68 H88 N2 O8



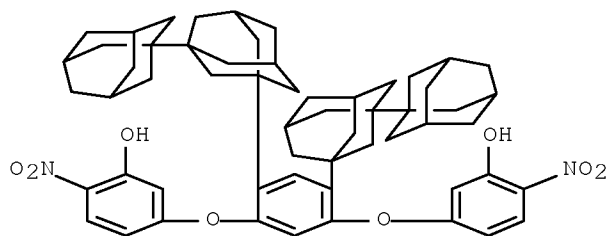
CM 2

CRN 897442-65-8

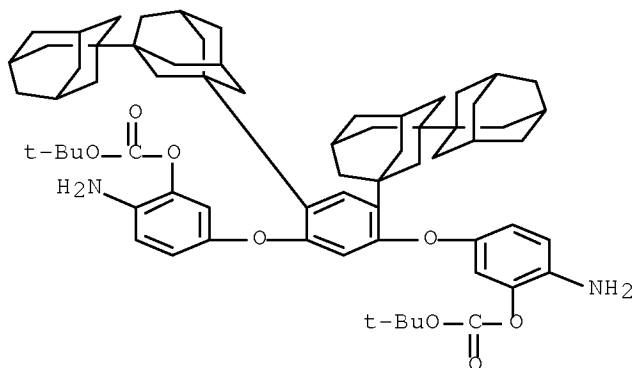
CMF C26 H36 Cl2 O2



IT 912818-86-1, 1,3-Bis(3-hydroxy-4-nitrophenoxy)-4,6-
 di(biadamantyl)benzene
 (for dianiline preparation; butoxycarbonyloxy-containing polyamides for
 polybenzoxazole films with good heat resistance and low dielec.
 constant for semiconductor devices)
 RN 912818-86-1 HCAPLUS
 CN Phenol, 3,3'-[[4,6-bis([1,1'-bitricyclo[3.3.1.1.3,7]decan]-3-yl)-1,3-
 phenylene]bis(oxy)]bis[6-nitro- (9CI) (CA INDEX NAME)



- IT 912818-88-3P
 (monomer; butoxycarbonyloxy-containing polyamides for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)
 RN 912818-88-3 HCAPLUS
 CN Carbonic acid, [4,6-bis([1,1'-bitricyclo[3.3.1.1^{3,7}]decan]-3-yl)-1,3-phenylene]bis[oxy(6-amino-3,1-phenylene)] bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



- CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 76
 IT 912818-90-7P 912818-92-9P 912818-94-1P
 912818-96-3P
 (butoxycarbonyloxy-containing polyamides for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)
 IT 912804-00-3P 912804-03-6P 912804-06-9P 912804-09-2P
 912818-89-4P 912818-91-8P 912818-93-0P
 912818-95-2P
 (butoxycarbonyloxy-containing polyamides for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)
 IT 24424-99-5, Di-tert-butyl dicarbonate 406680-57-7,
 9,9-Bis(3-nitro-4-hydroxyphenyl)fluorene 897442-29-4,
 Bis(3-nitro-4-hydroxyphenyl)biadamantane 912818-86-1,
 1,3-Bis(3-hydroxy-4-nitrophenoxy)-4,6-di(biadamantyl)benzene
 (for dianiline preparation; butoxycarbonyloxy-containing polyamides for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)
 IT 512172-69-9P 912818-87-2P 912818-88-3P

(monomer; butoxycarbonyloxy-containing polyamides for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)

L31 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1090718 HCAPLUS Full-text

DOCUMENT NUMBER: 145:439509

TITLE: Polyesters, polybenzoxazoles from them with excellent heat resistance and low dielectric constant, and varnishes, films, and semiconductor devices using them

INVENTOR(S): Oki, Hiromi; Enoki, Naoshi

PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 26pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2006282814	A	20061019	JP 2005-103568	20050331
PRIORITY APPLN. INFO.:			JP 2005-103568	20050331

ED Entered STN: 19 Oct 2006

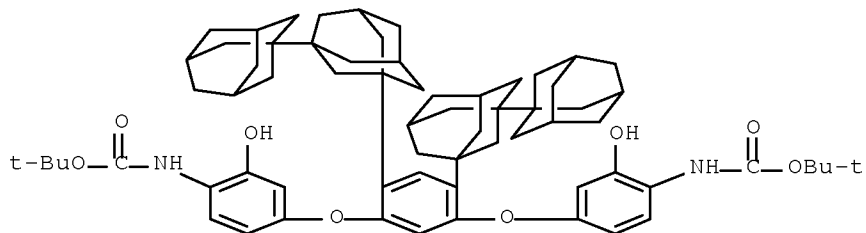
AB The polyesters, useful for interlayer dielects., surface protecting films, and etching stopper films, have repeating units obtained by reacting bisphenols (Me₃COC(OH)Q)₂X (Q = hydroxyphenylene; X = C-containing organic group, O) and dicarboxylic acids. Thus, a polyester from 9,9-bis[(3-tert-butoxycarbonylamino-4-hydroxy)phenyl]fluorene and 3,3'-(5,5',7,7'-tetramethyl-1,1'-biadamantane)dicarboxylic acid dichloride gave a film with glass-transition temperature 410°, heat decomposition temperature 528°, and dielec. constant 2.71.

IT 912803-97-5P

(bisphenol; butoxycarbonylamino-containing polyesters for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)

RN 912803-97-5 HCAPLUS

CN Carbamic acid, [[4,6-bis([1,1'-bitricyclo[3.3.1.1³.7]decan]-3-yl)-1,3-phenylene]bis[oxy(2-hydroxy-4,1-phenylene)]]bis-, bis(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



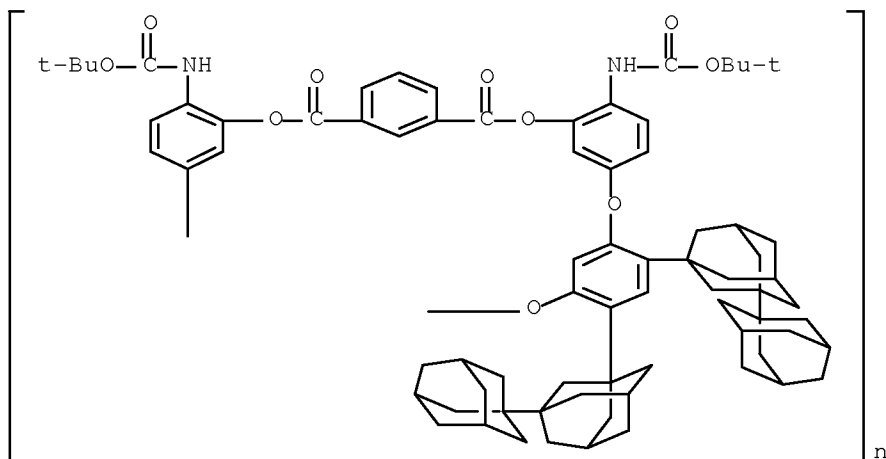
IT 912804-05-8P 912804-08-1P

(butoxycarbonylamino-containing polyesters for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor

devices)

RN 912804-05-8 HCAPLUS

CN Poly[oxy[4,6-bis([1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]oxy[4-[[1,1-dimethylethoxy)carbonyl]amino]-1,3-phenylene]oxycarbonyl-1,3-phenylenecarbonyloxy[6-[[1,1-dimethylethoxy)carbonyl]amino]-1,3-phenylene]] (9CI) (CA INDEX NAME)



RN 912804-08-1 HCAPLUS

CN Poly[oxy[4,6-bis([1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]oxy[4-[[1,1-dimethylethoxy)carbonyl]amino]-1,3-phenylene]oxycarbonyl(5,5',7,7'-tetramethyl[1,1'-bitricyclo[3.3.1.1³,7]decane]-3,3'-diyl)carbonyloxy[6-[[1,1-dimethylethoxy)carbonyl]amino]-1,3-phenylene]] (9CI) (CA INDEX NAME)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

IT 912804-04-7P 912804-07-0P

(butoxycarbonylamino-containing polyesters for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)

RN 912804-04-7 HCAPLUS

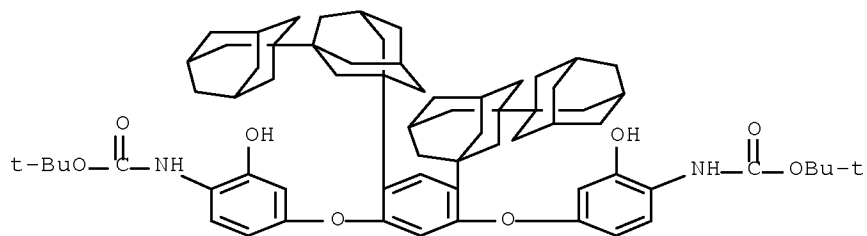
CN Carbamic acid, [[4,6-bis([1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]bis[oxy(2-hydroxy-4,1-phenylene)]]bis-, bis(1,1-dimethylethyl) ester, polymer with 1,3-benzenedicarbonyl dichloride (9CI) (CA INDEX NAME)

CM 1

CRN 912803-97-5

CMF C68 H88 N2 O8

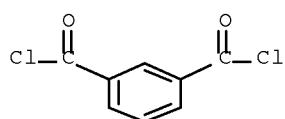
10/531,208



CM 2

CRN 99-63-8

CMF C8 H4 C12 O2



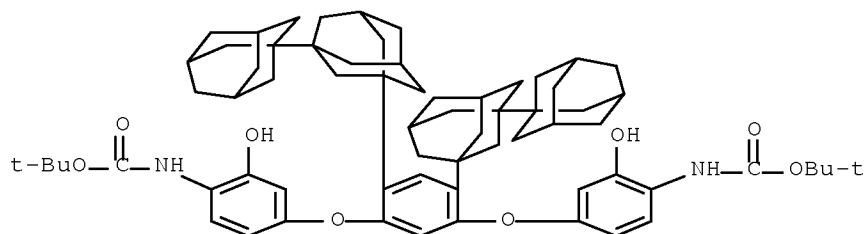
RN 912804-07-0 HCAPLUS

CN Carbamic acid, [[4,6-bis([1,1'-bitricyclo[3.3.1.1.3,7]decan]-3-yl)-1,3-phenylene]bis[oxy(2-hydroxy-4,1-phenylene)]]bis-, bis(1,1-dimethylethyl) ester, polymer with 5,5',7,7'-tetramethyl[1,1'-bitricyclo[3.3.1.1.3,7]decane]-3,3'-dicarbonyl dichloride (9CI) (CA INDEX NAME)

CM 1

CRN 912803-97-5

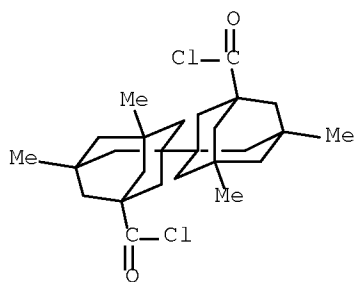
CMF C68 H88 N2 O8



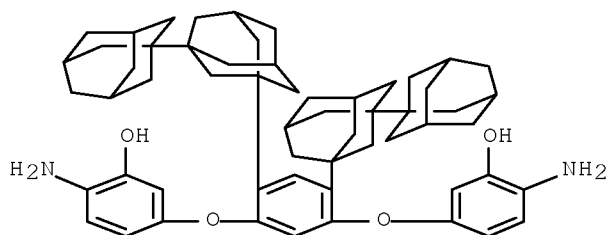
CM 2

CRN 897442-65-8

CMF C26 H36 C12 O2



- IT 890404-08-7, 1,3-Bis(3-hydroxy-4-aminophenoxy)-4,6-di(biadamantyl)benzene
(for bisphenol preparation; butoxycarbonylamino-containing polyesters for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)
- RN 890404-08-7 HCAPLUS
- CN Phenol, 3,3'-[[4,6-bis([1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis[6-amino- (CA INDEX NAME)



- CC 38-3 (Plastics Fabrication and Uses)
Section cross-reference(s): 76
- IT 912803-95-3P 912803-96-4P 912803-97-5P
(bisphenol; butoxycarbonylamino-containing polyesters for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)
- IT 912803-99-7P 912804-02-5P 912804-05-8P
912804-08-1P
(butoxycarbonylamino-containing polyesters for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)
- IT 912803-98-6P 912804-00-3P 912804-01-4P 912804-03-6P
912804-04-7P 912804-06-9P 912804-07-0P
912804-09-2P
(butoxycarbonylamino-containing polyesters for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)
- IT 20638-07-7, 9,9-Bis(3-amino-4-hydroxyphenyl)fluorene 24424-99-5,
Di-tert-butyl dicarbonate 890404-08-7,
1,3-Bis(3-hydroxy-4-aminophenoxy)-4,6-di(biadamantyl)benzene
897442-30-7, Bis(3-amino-4-hydroxyphenyl)biadamantane
(for bisphenol preparation; butoxycarbonylamino-containing polyesters for polybenzoxazole films with good heat resistance and low dielec. constant for semiconductor devices)

L31 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:679352 HCAPLUS Full-text

DOCUMENT NUMBER: 145:124943

TITLE: 1,1':3',1'':3'',1'''-Tetraadamantanephenols and their manufacture

INVENTOR(S): Nakai, Yasuto; Kamuro, Yoshiaki; Enoki, Naoshi; Izumi, Atsushi

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan; Sumitomo Bakelite Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

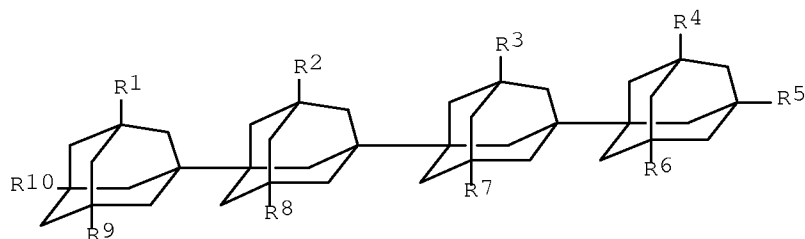
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006182690	A	20060713	JP 2004-377217	20041227
PRIORITY APPLN. INFO.:			JP 2004-377217	20041227

OTHER SOURCE(S): MARPAT 145:124943

ED Entered STN: 13 Jul 2006

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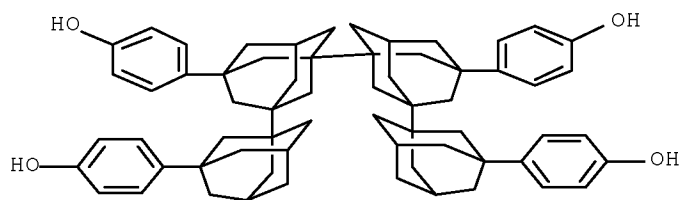
AB The tetraadamantanephenols, useful for highly functional polymeric materials, are I [R1-R10 = H, halo, (halo)alkyl, OH, (halo)alkoxy, (substituted) C6H4OR11; R11 = H, protective group, salt-forming atom or atomic group; ≥1 of R1-R10 = (substituted) C6H4OR11]. Thus, 3,5',5'',3'''-tetrabromo-1,1':3',1'':3'',1'''-tetraadamantane (manufactured from 3-bromo-1,1'-biadamantane in 2 steps) was treated with PhOH to give 75% 3,5',5'',3'''-tetrakis(4-hydroxyphenyl)-1,1':3',1'':3'',1'''-tetraadamantane.

IT 897364-78-2P

(manufacture of tetraadamantanephenols)

RN 897364-78-2 HCAPLUS

CN Phenol, 4,4',4'',4'''-[1,1':3',1'':3'',1'''-quatertricyclo[3.3.1.1.3,7]decane]-3,3'',5',5'''-tetrayltetrakis- (9CI)
(CA INDEX NAME)



CC 35-2 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 24

IT 897364-78-2P 897364-79-3P
(manufacture of tetraadamantanephenols)

L31 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:578216 HCAPLUS Full-text

DOCUMENT NUMBER: 145:46371

TITLE: Bisaminophenol compounds for low dielectric resins

INVENTOR(S): Izumi, Atsushi

PATENT ASSIGNEE(S): Sumitomo Bakelite Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2006151936	A	20060615	JP 2005-24381	20050131
PRIORITY APPLN. INFO.:			JP 2004-314655	A 20041028

OTHER SOURCE(S): MARPAT 145:46371

ED Entered STN: 16 Jun 2006

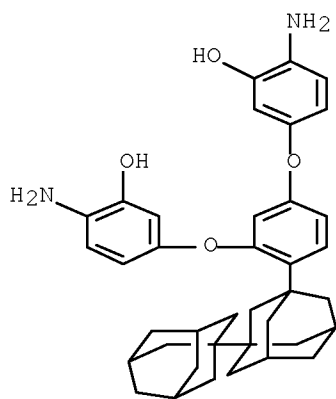
AB The present invention relates to diamondoid structure-containing bisaminophenols. Thus, 116 mmol 1-bromoadamantane and 118 mmol 1,3-dihydroxybenzene were refluxed at 130° for 24 h to give 23.0 g 4-(1-adamantyl)-1,3-dihydroxybenzene, 22.0 g of which was mixed with 44.4 g 2-benzyloxy-4-fluoronitrobenzene and 37.3 g potassium carbonate in 150 mL DMF and reacted at 135° for 12 h, 55.0 g of the resulting 4-(1-adamantyl)-1,3-bis(4-nitro-3-benzyloxyphenoxy)benzene was hydrogenated in the presence of Pd/C to give 4-(1-adamantyl)-1,3-bis(4-amino-3-hydroxyphenoxy)benzene, showing dielec. constant 2.8.

IT 890404-06-5P 890404-08-7P 890404-14-5P
890404-18-9P

(preparation of bisaminophenol compds. for low dielec. resins)

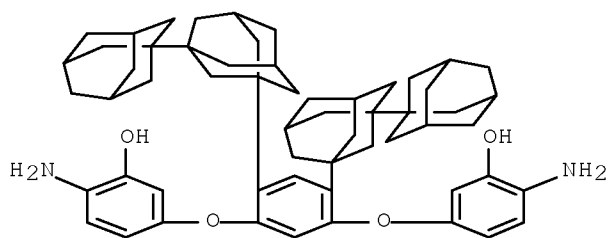
RN 890404-06-5 HCAPLUS

CN Phenol, 3,3'-[(4-[1,1'-bitricyclo[3.3.1.1³,7]decan]-3-yl-1,3-phenylene)bis(oxy)]bis[6-amino- (9CI) (CA INDEX NAME)



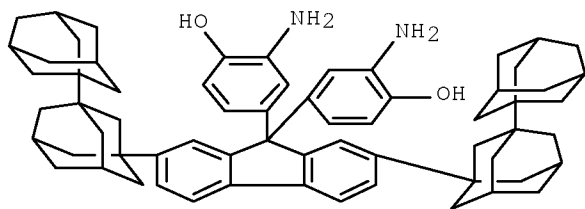
RN 890404-08-7 HCAPLUS

CN Phenol, 3,3'-[[4,6-bis([1,1'-bitricyclo[3.3.1.3^{1,3}1,7]decan]-3-yl)-1,3-phenylene]bis(oxy)]bis[6-amino- (CA INDEX NAME)



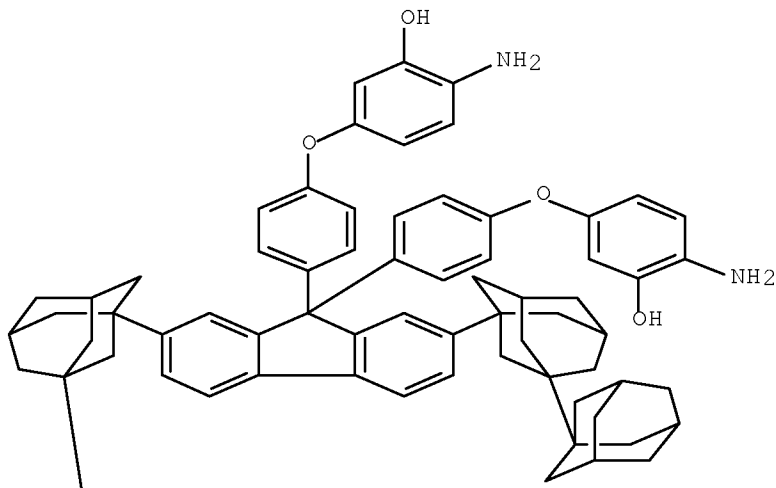
RN 890404-14-5 HCAPLUS

CN Phenol, 4,4'-[[2,7-bis([1,1'-bitricyclo[3.3.1.3^{1,3}1,7]decan]-3-yl)-9H-fluoren-9-ylidene]bis[2-amino- (9CI) (CA INDEX NAME)



RN 890404-18-9 HCAPLUS

CN Phenol, 3,3'-[[2,7-bis([1,1'-bitricyclo[3.3.1.3^{1,3}1,7]decan]-3-yl)-9H-fluoren-9-ylidene]bis(4,1-phenyleneoxy)]bis[6-amino- (9CI) (CA INDEX NAME)



CC 35-2 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 76
 IT 890404-04-3P 890404-05-4P 890404-06-5P 890404-07-6P
 890404-08-7P 890404-09-8P 890404-10-1P 890404-13-4P
 890404-14-5P 890404-16-7P 890404-18-9P
 890404-19-0P 890404-20-3P 890404-22-5P 890404-24-7P
 890404-26-9P 890404-27-0P 890404-29-2P 890404-31-6P
 890404-33-8P 890404-34-9P 890404-35-0P 890404-38-3P
 890404-39-4P 890404-40-7P 890404-41-8P 890404-42-9P
 (preparation of bisaminophenol compds. for low dielec. resins)

L31 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:355223 HCAPLUS Full-text

DOCUMENT NUMBER: 140:383102

TITLE: Photoresist base material, method for purification thereof, and photoresist compositions containing the same

INVENTOR(S): Ueda, Mitsuru; Ishii, Hirotooshi

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004036315	A1	20040429	WO 2003-JP11137	20030901
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004191913	A	20040708	JP 2003-112458	20030417
AU 2003261865	A1	20040504	AU 2003-261865	20030901
EP 1553451	A1	20050713	EP 2003-808872	20030901
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1688939	A	20051026	CN 2003-824240	20030901
TW 282037	B	20070601	TW 2003-92124659	20030905
US 20050271971	A1	20051208	US 2005-531208	20050414
PRIORITY APPLN. INFO.:			JP 2002-300144	A 20021015
			JP 2003-112458	A 20030417
			WO 2003-JP11137	W 20030901

OTHER SOURCE(S): MARPAT 140:383102

ED Entered STN: 30 Apr 2004

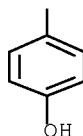
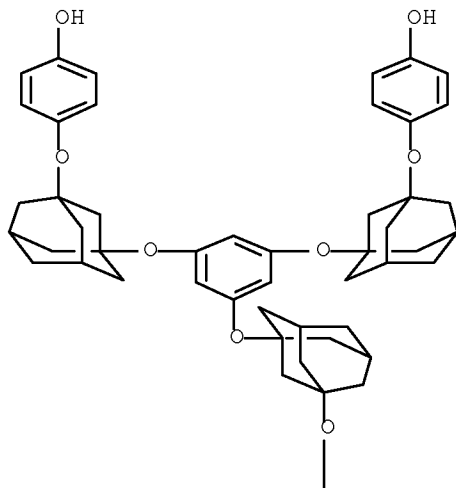
AB The invention relates to photoresist base materials consisting of extreme UV sensitive-organic compds. represented by the general formula (B-X)l(C-Y)m(D-Z)nA: [wherein A is a central structure consisting of an aliphatic group having C1-50, an aromatic group having C6-50 carbon, an organic group bearing both, or an organic group having a cyclic structure formed by repetition of these groups; B to D are each an extreme UV sensitive group, a group exhibiting a reactivity on the action of a chromophore sensitive to extreme UV rays, a C1-50 aliphatic or C6-50 aromatic group having such a group, an organic group having both groups, or a substituent having a branched structure; X to Z are each a single bond or an ether linkage; l to n are integers of 0-5 satisfying the relationship: $l + m + n \leq 1$; and A to D may each have a heteroatom-bearing substituent]. The invention provides photoresist base materials and photoresist compns. which enable ultrafine lithog. with extreme UV rays or the like and is suitable for use in semiconductor device fabrication.

IT 683227-73-8P

(photoresist base material, method for purification thereof, and photoresist compns. containing the same)

RN 683227-73-8 HCAPLUS

CN Phenol, 4,4',4''-[1,3,5-benzenetriyltris(oxytricyclo[3.3.1.1^{3,7}]decane-3,1-diylloxy)]tris- (9CI) (CA INDEX NAME)



IC ICM G03F007-039
 ICS C07C039-17; C07C069-736; C07D309-04
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other
 Reprographic Processes)
 Section cross-reference(s): 76
 IT 65338-98-9DP, tetrahydropyranyl and benzyl derivative ethers
 125748-07-4P, Calix[4]resorcinarene 211427-64-4P 683227-72-7P
 683227-73-8P 683227-74-9P 683227-75-0P 683227-76-1P
 (photoresist base material, method for purification thereof, and
 photoresist compns. containing the same)
 REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

L31 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2003:638126 HCAPLUS Full-text
 DOCUMENT NUMBER: 140:111118
 TITLE: Synthesis and conformations of adamantylated
 calix[5]- and -[6]arenes
 AUTHOR(S): Shokova, E. A.; Khomich, E. V.; Akhmetov, N. N.;
 Vatsuro, I. M.; Luzikov, Yu. N.; Kovalev, V. V.
 CORPORATE SOURCE: Faculty of Chemistry, Moscow State University,
 Moscow, 119992, Russia
 SOURCE: Russian Journal of Organic Chemistry (Translation

of Zhurnal Organicheskoi Khimii) (2003), 39(3),
368-383

CODEN: RJOCEQ; ISSN: 1070-4280

PUBLISHER: MAIK Nauka/Interperiodica Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:111118

ED Entered STN: 17 Aug 2003

AB Procedures have been developed for the preparation of completely and partially adamantylated calix[n]arenes (n = 5, 6) by reaction of 3-R-substituted 1-hydroxyadamantanes (R = H, 4-MeC₆H₄, 4-MeSO₂C₆H₄, 4-HO-3-HOCOC₆H₃, HOCOCH₂) with p-H-calix[n]arenes (n = 5, 6) and 5,11,23,29-tetra-tert-butylcalix[6]arene in trifluoroacetic acid. Lower- and upper-rim modification of the prepared compds. has been studied. According to ¹H NMR data, adamantylcalix[6]arenes possessing carboxymethyl groups in the adamantane moieties are characterized by reduced conformational mobility.

IT 647832-58-4P 647832-59-5P 647832-61-9P

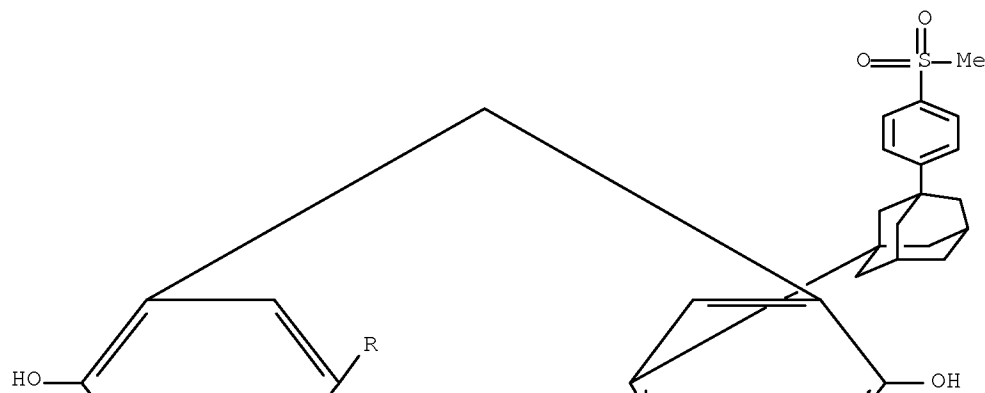
647832-63-1P 647832-64-2P

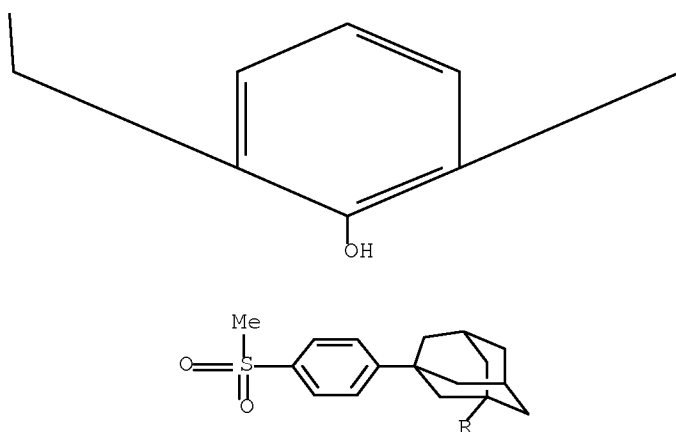
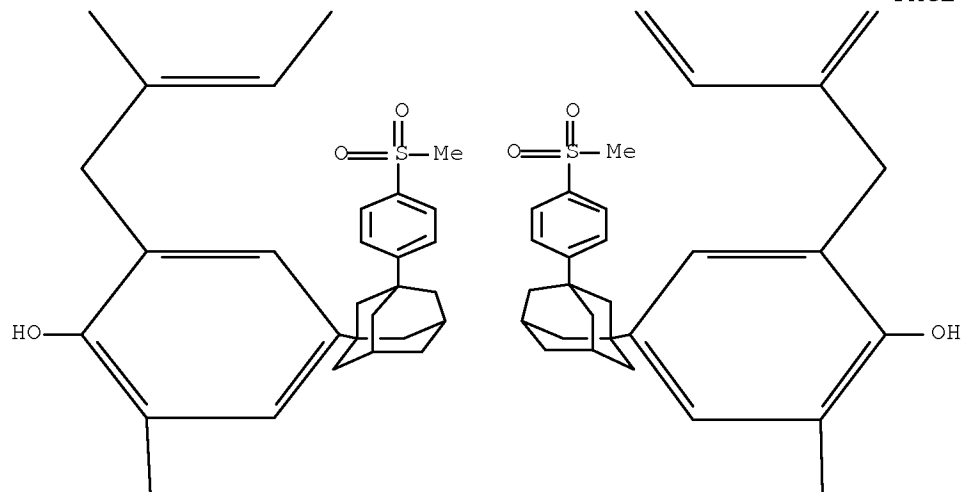
(preparation and conformations of adamantylated calix[5]- and
- [6]arenes)

RN 647832-58-4 HCAPLUS

CN Hexacyclo[25.3.1.13,7.19,13.115,19.121,25]pentatriaconta-
1(31),3,5,7(35),9,11,13(34),15,17,19(33),21,23,25(32),27,29-
pentadecaene-31,32,33,34,35-pentol,
5,11,17,23-tetrakis[3-[4-
(methylsulfonyl)phenyl]tricyclo[3.3.1.13,7]dec-1-yl]- (CA INDEX NAME)

PAGE 1-A





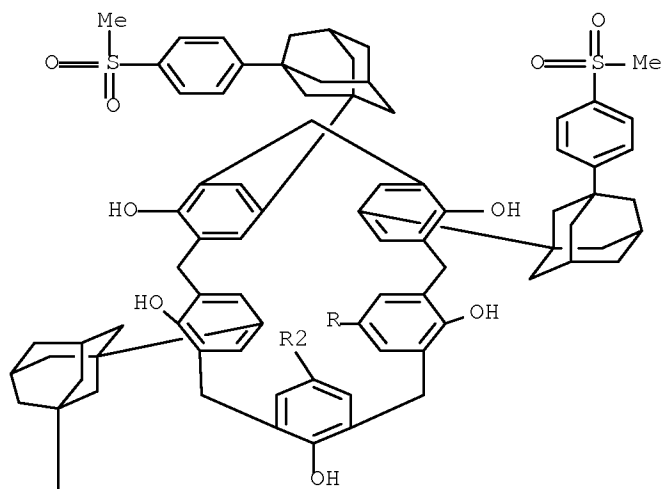
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 CN Heptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetraconta-
 1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,
 35-octadecaene-37,38,39,40,41,42-hexol,
 5,11,17,23,29-pentakis[3-[4-
 (methylsulfonyl)phenyl]tricyclo[3.3.1.1.3,7]dec-1-yl]- (9CI) (CA INDEX
 NAME)

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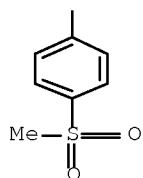
RN 647832-61-9 HCAPLUS
 CN Hexacyclo[25.3.1.13,7.19,13.115,19.121,25]pentatriaconta-
 1(31),3,5,7(35),9,11,13(34),15,17,19(33),21,23,25(32),27,29-
 pentadecaene-31,32,33,34,35-pentol,
 5,11,17,23,29-pentakis[3-[4-
 (methylsulfonyl)phenyl]tricyclo[3.3.1.1.3,7]dec-1-yl]- (9CI) (CA INDEX
 NAME)

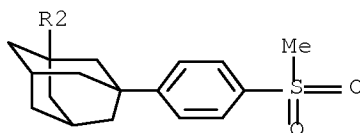
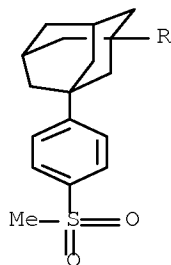
NAME)

PAGE 1-A



PAGE 2-A





RN 647832-63-1 HCAPLUS
 CN Heptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetraconta-
 1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,
 35-octadecaene-37,38,39,40,41,42-hexol,
 5,11,17,23,29,35-hexakis[3-(4-methylphenyl)tricyclo[3.3.1.13,7]dec-1-
 yl]- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 647832-64-2 HCAPLUS
 CN Heptacyclo[31.3.1.13,7.19,13.115,19.121,25.127,31]dotetraconta-
 1(37),3,5,7(42),9,11,13(41),15,17,19(40),21,23,25(39),27,29,31(38),33,
 35-octadecaene-37,38,39,40,41,42-hexol,
 5,11,17,23,29,35-hexakis[3-[4-
 (methylsulfonyl)phenyl]tricyclo[3.3.1.13,7]dec-1-yl]- (9CI) (CA INDEX
 NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CC 25-29 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
 Section cross-reference(s): 24

IT 647832-58-4P 647832-59-5P 647832-60-8P
 647832-61-9P 647832-63-1P 647832-64-2P
 647832-66-4P 647832-68-6P 647832-69-7P 647832-70-0P
 647832-72-2P 647832-73-3P 647832-74-4P 647832-75-5P
 647832-76-6P 647832-79-9P 647832-80-2P 647832-82-4P
 647832-83-5P 647832-86-8P

(preparation and conformations of adamantylated calix[5]- and
 -[6]arenes)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR
 THIS RECORD. ALL CITATIONS AVAILABLE IN THE
 RE FORMAT

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FILE 'HCAPLUS' ENTERED AT 08:51:11 ON 19 NOV 2008

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SEL RN

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211427-64-4/BI OR 24424-99-5/BI OR 27955-94-8/BI OR
29654-55-5/BI OR 5001-18-3/BI OR 5292-43-3/BI OR 623-05-2/B
I OR 65338-98-9/BI OR 683227-72-7/BI OR 683227-73-8/BI OR
683227-74-9/BI OR 683227-75-0/BI OR 683227-76-1/BI OR
75-07-0/BI OR 99181-50-7/BI)
ACT LEE208/A

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L5 STR L3
L6 0 SEA SSS SAM L5
L7 STR L5
L8 50 SEA SSS SAM L7
L9 STR L7
L10 50 SEA SSS SAM L9
L11 STR L5
L12 12 SEA SSS SAM L9 AND L11
L13 STR L11
L14 STR L9
L15 0 SEA SSS SAM L14
L16 6945 SEA SSS FUL L9 AND L11
L17 1173 SEA ABB=ON PLU=ON L16 AND L4
L18 1 SEA ABB=ON PLU=ON L16 AND L2
SAV L16 LEE208F/A
L19 3 SEA SUB=L16 SSS SAM L14
L20 12 SEA ABB=ON PLU=ON L16 AND ?TRIYLTRIS?
L21 STR L14
L22 6 SEA SUB=L16 SSS SAM L21
L23 87 SEA SUB=L16 SSS FUL L21
SAV L23 LEE208G/A

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L25 21 SEA ABB=ON PLU=ON L23
L26 22 SEA ABB=ON PLU=ON L24 OR L25

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L27 31 SEA ABB=ON PLU=ON L23 AND PENTACYCLO?
L28 17316 SEA ABB=ON PLU=ON 11417.1/RID
L29 56 SEA ABB=ON PLU=ON L23 NOT L28

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L31 17 SEA ABB=ON PLU=ON L30 OR